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Abbreviations and Acronyms

AIA	Adverse impact analysis
CoVE	Centre of Vocational Excellence
C3E	Clean Energy Education and Empowerment" initiative
DE&I	Diversity Equity and Inclusion
e.g	exempli gratia
EU	European Union
EC	European Commission
ERGs	Employee resource groups
HEI	Higher Education Institution
HR	Human resource
H2-DEIA	Hydrogen Diversity, Equity, Inclusion, and Accessibility Initiative
i.e.	id est
IEA	International Energy Agency
ILO	International Labour Organization
IRENA	International Renewable Energy Agency
LGBTQ+	Lesbian, Gay, Bisexual, Transgendered, Queer, and others
KPI	Key Performance Indicator
R&D	Research and Development
SDGs	Sustainable Development Goals
SMEs	Small-Medium Enterprises
STEM	Science, Technology, Engineering, and Mathematics
TEU	Treaty on European Union
USAID	United States Agency for International Development
USEA	United States Energy Association
VET	Vocational Education and Training
WEF	World Economic Forum
WEN	Women's Energy Network
WiRE	Women in Renewable Energy
WP	Work package
WRISE	Women of Renewable Industries and Sustainable Energy

Abstract

This Deliverable Report is the main output of Task 2.4, "*Design and Development of Guidelines for Project Implementation based on Principles of Diversity, Gender Equality, and Social Inclusion*," led by EEO Group. It focuses on integrating these principles in the H2Excellence project to foster a diverse and inclusive CoVE environment, enhancing innovation and sustainability. The report presents both a theoretical and methodological framework, reviews the current state of DE&I in the hydrogen sector, and proposes 15 Action Plans emphasizing gender mainstreaming in project activities as well as offering recommendations to Hydrogen Organizations for an inclusive workforce in the Green Hydrogen value chain.

Keywords: *H2Excellence, Diversity, Gender Mainstreaming, Gender Equality, Non-Discrimination, Social Inclusion, Hydrogen Sector, EU Shared Values, DE&I, Action Plans, Inclusion Policy, Sustainable Energy, Green Hydrogen, Fuel Cells.*

Executive Summary

The theoretical framework of this report is founded on the European Union's shared values of diversity, gender equality, non-discrimination, and social inclusion. These values, rooted in the EU's identity and actions, are enshrined in the Treaty on European Union and have shaped the EU's policies and initiatives, particularly in promoting individual rights and social inclusion.

The incorporation of these values in the H2Excellence project is essential for achieving goals in the hydrogen sector. Emphasizing diversity, gender equality, non-discrimination, and social inclusion is crucial for driving innovation, productivity, and sustainable growth, the project seamlessly integrates these core values into its operations, fostering a multifaceted approach that enriches the hydrogen sector. By promoting diversity in the workforce, the project enhances creativity and problem-solving capabilities, essential in the rapidly evolving landscape of hydrogen technology. It also places a strong emphasis on gender equality, actively addressing gender imbalances to ensure an inclusive and equitable work environment. In addition, the project steadfastly upholds principles of non-discrimination, guaranteeing fair treatment and equal opportunities for all participants and stakeholders. This commitment extends to social inclusion, where the project develops and implements strategies to ensure broad participation and access to the myriad opportunities emerging from the burgeoning hydrogen economy. Recent advancements in the hydrogen sector, such as the H2- DEIA platform and the Women in Green Hydrogen initiatives, demonstrate a commitment to these values, positioning the H2Excellence project at the forefront of a sustainable and inclusive transition in the energy sector.

The current state of Diversity, Equity, and Inclusion (DE&I) in the Hydrogen Sector, as outlined in Chapter 3, presents a multifaceted perspective on the challenges and opportunities within this evolving industry. Lack of specific data, women's representation in the energy sector, disparity in STEM education and vocational training in CoVE countries, retention of women in STEM occupations, intersectionality and diversity in STEM fields or positive shifts in the energy sector are some of the identified are some of the facets of this outlook. In parallel, insights from the H2Excellence Project's survey shed light on specific areas within the hydrogen sector that require attention and recommendations have been provided. By implementing this guidance, the H2Excellence project aims to promote gender equality, enhance diversity, and ensure non-discrimination and social inclusion, aligning with EU shared values and contributing to a more equitable and successful hydrogen sector.

Within this context the "H2Excellence Inclusion Package" provides comprehensive guidelines for implementing DE&I initiatives within the Green Hydrogen sector. This package is designed to encourage the participation of women and other underrepresented groups in the sector and is structured around several key components. The package includes a multifaceted mechanism based on the Erasmus+ and European Solidarity Corps Inclusion and Diversity Strategy. It encompasses outreach and awareness activities, support and mentorship programs, and the adoption of inclusive policies and practices. These initiatives are organized into 15 comprehensive Action Plans, providing specific guidelines and best practices.

The H2Excellence project has established specific criteria for participation in project activities, aligning with the ERASMUS+ inclusion and diversity strategy. These criteria focus on addressing barriers faced by various groups, including people with disabilities, those health problems, cultural differences, social and economic barriers, and discrimination factors. The project prioritizes underrepresented groups in STEM education, such as women, people with disabilities, migrants, and ethnic minorities. A focus is also placed on engaging youth living near Centers of Vocational Excellence (CoVEs), including those associated with Vocational Education and Training (VET) institutes, Higher Education Institutions (HEIs), and Hydrogen Valleys/Organizations.

In the Guidelines for Project Implementation 15 Action Plans have been proposed, which cover aspects such as student recruitment equity, inclusive dissemination and communication strategies, promoting gender-inclusive language, ensuring accessibility in online programs, and promoting gender equity in funding and support. They also include plans for inclusive internship opportunities, mentorship, STEM pathways for women, peer networking events, visibility and recognition initiatives, improving accessibility in workplaces, promoting an inclusive workplace culture, diverse recruitment strategies, developing a supplier diversity policy, and establishing collaborative networks with women's organizations. The project activities are designed to prioritize inclusivity and accessibility, with an Inclusivity Impact. Assessment for each proposed action item ensures that the activities are accessible to a diverse range of participants and represent diverse perspectives. The package also includes a framework for regular assessments and reporting, feedback mechanisms, and performance metrics for continuous improvement in DE&I efforts.

Finally, the report aims to provide a comprehensive framework for creating Inclusion Plans in the hydrogen sector, emphasizing this as a vital commitment to nurturing a workplace culture enriched by Diversity, Equity, and Inclusion (DE&I). This crucial section guides organizations through developing an Inclusion Plan that serves as the foundation of their DE&I strategy, ensuring a workplace environment that not only values diversity but thrives on it. The report outlines essential components and practical steps, encompassing the involvement of leadership teams, defining diversity, setting measurable DE&I goals, and detailed implementation strategies. This guide is a dynamic blueprint for organizations, especially in the evolving hydrogen sector, to harness the full potential of a diverse workforce and foster a genuinely inclusive working environment.

The H2Excellence project emerges as a forerunner, setting a new standard in the hydrogen sector and beyond. It frames DE&I as a living, breathing framework, essential for the industry's innovation and sustainability. As we embrace these principles and continuously adapt to evolving challenges and opportunities, we pave the way for a more equitable, innovative, and resilient green hydrogen future. This report is a critical milestone in that journey, arming stakeholders with the tools and insights needed to weave diversity, equity, and inclusion into the very fabric of the hydrogen sector. The path ahead is one of ongoing engagement and evolution, ensuring that DE&I remain a cornerstone in the ever-changing landscape of this vital industry, and heralding a future where diversity isn't just valued – it's the catalyst for a thriving, dynamic green hydrogen sector.

1. Introduction

1.1 Scope of the H2Excellence Project and Task 2.4

The H2Excellence project, an initiative funded under the Erasmus+ Programme by the European Commission, aims to establish Fuel Cells and Green Hydrogen Centers of Vocational Excellence (CoVE). This project is pivotal for Europe's transition towards affordable, secure, and sustainable energy. By focusing on the development of centers that specialize in fuel cells and green hydrogen technology, H2Excellence plays a crucial role in advancing the European Union's energy and climate goals¹.

WP2 Task 2.4, titled "Design and Development of Guidelines for Project Implementation based on Principles of EU shared values of Diversity, Gender Equality, and Social Inclusion," is a critical component of the H2Excellence project. This task is aligned with the Erasmus+ Diversity and Inclusion Strategy² as well as the "Clean Energy Education and Empowerment" initiative³, that underscores the commitment to stimulate the active presence of women in the energy transition process. Key actions of this task include:

- **Encouraging Women's Participation:** Developing criteria to ensure women's equal representation in project activities, including training, promotional activities, and placements.
- **Inclusion Plan for Companies:** Creating an inclusion plan for companies in the hydrogen sector, focusing on diversity and social inclusion principles.
- **Deployment and Monitoring:** Introducing piloting selection criteria, promoting the preparation of inclusion plans, and establishing a robust monitoring process.
- **Finalizing a Comprehensive Package:** Developing a diversity, gender equality, and social inclusion package adaptable to the Hydrogen Sector and transferable to other sectors.

1.2 Purpose of This Report

This report represents the culmination of Task 2.4's efforts. It serves as a comprehensive guideline that encapsulates the strategy, specific activities/actions, and targets for involving underrepresented groups in the hydrogen sector ("H2Excellence Inclusion package"). The primary purpose of this report is to:

¹ For detailed information about the scope and broader implications of the H2Excellence project, please refer to the official project website <https://h2excellence.eu/>. The website provides comprehensive insights into the project's overarching objectives, participating countries, key stakeholders, and its alignment with the European Union's strategic energy objectives.

² European Union (2021) Implementation guidelines: Erasmus+ and European Solidarity Corps Inclusion and Diversity Strategy, Directorate-General for Education, Youth, Sport and Culture European Commission. <https://erasmus-plus.ec.europa.eu/document/implementation-guidelines-erasmus-and-european-solidarity-corps-inclusion-and-diversity-strategy>

³ Known also as "Equality in Energy Transitions Initiative" <https://www.equality-energytransitions.org/>

1. **Provide a Framework:** Offer a structured and detailed framework to guide project implementation in line with the principles of diversity, gender equality, non-discrimination, and social inclusion.
2. **Facilitate Inclusive Participation:** Outline mechanisms and strategies to ensure wide and inclusive participation, particularly of women and other underrepresented groups, in the hydrogen industry.
3. **Support Policy and Decision Making:** Aid policymakers, industry stakeholders, and educational institutions in adopting and implementing inclusive practices.
4. **Promote EU Shared Values:** Reinforce the commitment to EU shared values in project execution and industry practices.
5. **Encourage Sector-Wide Adoption:** Serve as a reference model for similar initiatives within the hydrogen sector and potentially for other industries, fostering a more inclusive and diverse workforce.

By accomplishing these objectives, this report not only contributes to the success of the H2Excellence project but also aligns with the broader vision of promoting sustainable energy solutions underpinned by a commitment to social inclusion and equality.

1.3 Methodological framework

The methodology for the development of the “H2Excellence Inclusion Package” guidelines represents a comprehensive and collaborative approach. It integrates research, stakeholder insights, and best practices from various sectors, ensuring that the guidelines are grounded in empirical evidence and are responsive to the specific needs of the hydrogen sector. This approach not only fosters inclusivity and diversity within the H2Excellence project but also sets a benchmark for similar initiatives in the sector, contributing to the broader goal of creating a more inclusive and equitable European Union:

A. Research and Analysis

1. Shared Values Alignment:

The first step in developing these guidelines was aligning them with the EU's shared values of respect for human dignity, freedom, democracy, equality, the rule of law, and respect for human rights. This alignment ensures that the guidelines are not only relevant to the H2Excellence project but also resonate with the broader objectives of the European Union.

2. Desktop Research:

An extensive desktop research phase was undertaken to understand the current state of DE&I in the hydrogen sector. This involved reviewing existing literature, including academic papers, industry reports, and policy documents, to identify best practices, challenges, and opportunities in promoting diversity and inclusion. This research provided valuable insights into the gaps and needs within the sector, which were instrumental in shaping the guidelines.

3. Comparative Analysis:

A comparative analysis of similar initiatives in other sectors was conducted to draw lessons and insights. This involved examining successful DE&I strategies in industries such as technology, renewable energy, and education, to understand how these strategies could be adapted and applied within the context of the hydrogen sector.

B. Stakeholder Engagement

4. Stakeholder Survey:

A comprehensive survey was conducted among partners and stakeholders of the H2Excellence consortium. The objective was to gather direct input and perspectives on DE&I issues relevant to the hydrogen sector. The survey was intended for completion by HR managers or individuals in managerial or leadership positions, ideally those well-versed in hiring processes, policies, and DE&I initiatives within their organizations. This target audience was chosen to ensure that the responses reflected an in-depth understanding of organizational practices and challenges related to DE&I in the hydrogen sector.

The survey included questions on current practices, perceived gaps, and suggestions for improvement in DE&I:

- B. **General Information:** Collecting basic organizational details, including the type of organization, the role of hydrogen in their activities, and gender representation among employees.
- C. **Understanding the Gap:** Focusing on identifying roles with gender disparities and barriers to women's participation in the hydrogen sector.
- D. **Gender Equality & Diversity Mechanisms:** Exploring existing mechanisms within organizations that promote gender equality and diversity.
- E. **Monitoring and Evaluation:** Assessing the Key Performance Indicators (KPIs) used by organizations to monitor and evaluate their inclusion and diversity efforts.
- F. **Learning from Other Sectors:** Encouraging respondents to identify lessons and best practices from other industries that could be applicable to the hydrogen sector.

The responses collected from this survey were instrumental in providing a nuanced understanding of the current DE&I status within the hydrogen sector. The insights gained are critical for the development of the H2Excellence Inclusion Package, ensuring it is grounded in real-world experiences and tailored to address the specific needs and challenges of the sector.

5. Feedback and Consultation:

Following the survey, a series of consultations were held with key stakeholders, including industry experts, academic researchers, and representatives from underrepresented groups. These consultations provided a platform for in-depth discussions on the survey findings and for stakeholders to offer more detailed feedback and recommendations.

C. Synthesis and Formulation

6. Synthesis of Findings:

The information gathered from the research and stakeholder engagement phases was synthesized to identify key themes and priorities. This synthesis helped in pinpointing the critical areas where action was needed and in understanding the nuances of implementing DE&I strategies in the hydrogen sector.

7. Drafting of Inclusion Plans:

Based on the synthesized findings, a series of inclusion plans (Action Plans) were drafted. Each plan was designed to address specific areas of need within the project (and beyond the project lifecycle), such as encouraging the participation of women and other underrepresented groups, establishing diverse recruitment strategies, and ensuring accessible communication.

8. Iterative Refinement:

The draft plans underwent an iterative process of refinement, where they were reviewed and revised based on additional stakeholder feedback and expert input. This process ensured that the plans were practical, effective, and tailored to the specific needs of the hydrogen sector.

D. Monitoring and Evaluation Framework

9. Development of an Evaluation Framework:

To ensure the effective implementation of the guidelines, a monitoring and evaluation framework was developed. This framework outlines the criteria and methods for assessing the impact of the DE&I initiatives, allowing for continuous improvement and adaptation of the strategies over time.

1.4 Impact and significance

The H2Excellence project is anticipated to profoundly impact the hydrogen sector also by fostering a more diverse and inclusive workforce through CoVES collaboration. This significant shift is expected to drive innovation, enhance problem-solving capabilities, and contribute to the industry's overall growth and sustainability. The diverse perspectives and experiences brought by a varied workforce are known to foster creativity and drive innovation, which are crucial for addressing complex challenges in the energy sector. Additionally, this deliverable serves as an exemplary model for integrating Diversity, Equity, and Inclusion (DE&I) into other sectors, demonstrating the EU's strong commitment to creating a more inclusive and equitable society. By setting this precedent, H2Excellence not only contributes to the energy sector but also aligns with broader societal goals of inclusivity and equality, paving the way for a more integrated and cohesive European community.

1.5 Structure of the report

The remainder of this report details the specific plans and strategies developed under Task 2.4. Chapter 2 outlines the theoretical framework and guiding principles of the EU's shared values, focusing on diversity, gender equality, and social inclusion. Chapter 3 presents the findings from research and stakeholder surveys, including comparative analyses that informed the development of the H2Excellence Inclusion Package. Chapter 4 delves into the specific Action Plans devised, describing strategies and initiatives designed to foster a more inclusive and diverse hydrogen sector. This chapter also discusses the established monitoring and evaluation frameworks to assess the effectiveness of these initiatives. The report concludes with a synthesis of the project's broader impacts, both within the hydrogen industry and in other sectors, emphasizing the role of the H2Excellence project as a model for integrating diversity, equity, and inclusion into various industry ecosystems and contributing to the EU's vision of a more inclusive and equitable society.

2. Theoretical Framework

2.1. Overview of EU shared values on diversity, gender equality, non-discrimination, and social inclusion

The European Union is founded on a set of shared values that define its identity and underpin its actions. These values, including **respect for human dignity, freedom, democracy, equality, the rule of law, and respect for human rights**, are enshrined in Article 2 of the **Treaty on European Union (TEU)**⁴. These values not only reflect the common ground that member states stand upon but also guide the EU's internal and external policies.

The historical evolution of these values has been shaped by Europe's diverse cultural, religious, and humanist heritage. Following the devastating consequences of World War II, the European integration project was initiated to secure lasting peace through economic cooperation, political union, and social integration. This historical evolution led to the proclamation of the **Charter of Fundamental Rights of the European Union** in 2000, and later enshrined in the **Lisbon Treaty**, further consolidating these values, making them legally binding and highlighting the EU's commitment to promoting and protecting them both within its borders and in its relations with the wider world⁵.

This context of shared values has been pivotal in driving forward *policies and initiatives that champion diversity, ensure gender equality, and fight discrimination in all forms*. It has led to the development of a comprehensive *legal and policy framework aimed at protecting individual rights and promoting social inclusion*, which remains a cornerstone of the EU's mission in the 21st century.

"The Union is founded on the values of respect for human dignity, freedom, democracy, equality, the rule of law and respect for human rights, including the rights of persons belonging to minorities. These values are common to the Member States in a society in which pluralism, non-discrimination, tolerance, justice, solidarity and equality between women and men prevail."

Treaty on European Union, Article 2

⁴ Treaty on European Union, Art. 2. Official Journal of the European Union. 2012/C326, 26.10.2012 <https://bit.ly/3GJNU9c>

⁵ *Charter of Fundamental Rights of the European Union*, 2000/C 364/01. Official Journal of the European Union. <https://bit.ly/3Rn0gZB> Proclaimed in 2000, and later enshrined in the Lisbon Treaty, the Charter became legally binding when the Treaty of Lisbon entered into force: European Union, Treaty of Lisbon Amending the Treaty on European Union and the Treaty Establishing the European Community, 13 December 2007, 2007/C 306/01, available at: <https://www.refworld.org/docid/476258d32.html> [accessed 27 December 2023]

Definitions	
Diversity	As defined by the EU, diversity refers to the <i>acknowledgment, respect, and appreciation of the variety of characteristics in individuals and groups</i> . This encompasses <i>age, gender, ethnicity, religion, disability, sexual orientation, education, and national origin</i> . The EU embraces these differences to promote social cohesion and equal opportunities.
Gender Equality	The EU Gender Equality Strategy 2020-2025 aims for: “a Union where women and men, girls and boys, in all their diversity, are free to pursue their chosen path of life, have equal opportunities to strive, and can equally participate in and lead our European society”. Gender equality, according to European Institute for Gender Equality (EIGE), implies that: “the interests, needs and priorities of both women and men are taken into consideration, thereby recognizing the diversity of different groups of women and men. Gender equality is an issue that should concern and fully engage both men and women equally. Equality between women and men is seen both as a human rights issue and as a precondition for, and indicator of, sustainable people-centred development.” The Council of Europe, in a slightly different vein, in noting that some languages do not have a word for “gender”, defines gender equality as: “equal visibility, empowerment, responsibility and participation for both women and men in all spheres of public and private life. It also means an equal access to and distribution of resources between women and men ⁶ .”
Non-Discrimination	Non-discrimination is a principle asserting that <i>no person should face discrimination based on race, gender, age, disability, sexual orientation, religion, or belief</i> . EU law, particularly enshrined in its treaties and charters, mandates <i>equal treatment and opportunity</i> for all individuals, safeguarding against biases and unfair treatment in various spheres of life.
Social Inclusion	Social inclusion within the EU framework aims <i>at ensuring that all individuals have access to and can participate in key societal processes, particularly those who are at risk of poverty and social exclusion</i> . It involves improving opportunities, access to resources, and preventing and addressing exclusion and discrimination. This includes access to quality education, employment, healthcare, and social services.

G. Diversity

In the context of the European Union, diversity is understood as the acknowledgment and appreciation of the variety of traits in individuals and groups, encompassing characteristics such as age, gender, ethnicity, religion, disability, sexual orientation, education, and national origin. The EU's approach to diversity is integral

to its commitment to combating discrimination and promoting equal opportunities for all.

EU policies and directives aimed at promoting diversity are extensive. Notable among these is the **Employment Equality Directive (2000/78/EC)**, which establishes a general framework for *equal treatment in employment and occupation regardless of religion or belief*,

⁶ Driel, B., et al (2023) Issue paper on gender equality in and through education – Working Group on Equality and Values in Education and Training, European Commission, Directorate-General for Education, Youth, Sport and Culture, Publications Office of the European Union, 2023, <https://data.europa.eu/doi/10.2766/915001>

*disability, age, or sexual orientation*⁷. Moreover, the **Racial Equality Directive (2000/43/EC)** aims to *prevent discrimination based on racial or ethnic origin*⁸.

The impact of diversity on innovation and economic performance within the EU cannot be overstated. Diverse workforces are shown to *foster creativity and drive innovation by bringing together a wide range of perspectives and problem-solving approaches*. This is not only a catalyst for new ideas and services but also enhances the EU's competitive edge in the global market. Studies by the European Commission have indicated that companies with inclusive policies tend to perform better financially and have higher job creation rates⁹.

H. Gender Equality:

Gender equality is enshrined as a fundamental right within the European Union, underpinned by various treaties, including the Treaty on European Union¹⁰. It signifies the equal rights, responsibilities, and opportunities of women and men, girls and boys, and is integral to all aspects of social interactions and development.

⁷ Council Directive (2000/78/EC) of 27 November 2000, *Establishing a general framework for equal treatment in employment and occupation*, Official Journal of the European Communities <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32000L0078>

⁸ Council Directive (2000/43/EC) of 29 June 2000, *Implementing the principle of equal treatment between persons irrespective of racial or ethnic origin*, Official Journal of the European Union. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32000L0043>

⁹ European Commission, Directorate-General for Employment, Social Affairs and Inclusion, *The business case for diversity – Good practices in the workplace*, Publications Office, 2005,

¹⁰ Treaty on European Union – Articles 2 and 3, *ibid*.

The **EU's Gender Equality Strategy**¹¹ presents a framework for the EU's initiatives aimed at achieving gender equality by 2025. The Strategy outlines key objectives such as ending gender-based violence, ensuring equal participation across different sectors of the economy, closing gender pay and pension gaps, and challenging gender stereotypes. The strategy also highlights the importance of vocational education and training for women and men to ensure a gender balance and to tackle gender stereotypes (page 9). The **Council Recommendation on VET for sustainable competitiveness, social fairness and resilience** targeted measures promote gender balance in traditionally “male” or “female” professions and address gender related and other types of stereotypes together¹².

To close gender gaps, the EU has implemented in the past several directives and initiatives across various sectors. This includes the Directive on improving the gender balance among non-executive directors of companies listed on stock exchanges (2012/0299 (COD))¹³ and the Strategic engagement for gender equality 2016-2019¹⁴. The Work-life Balance Directive (2019/1158) is also a key piece of legislation aimed at offering better support for work-life balance for parents and caregivers, which

¹¹ European Commission, *A Union of Equality: Gender Equality Strategy 2020-2025*, Communication from the commission to the European parliament, the council, the European economic and social committee and the committee of the regions COM (2020) 152 final <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020DC0152>

¹² COUNCIL RECOMMENDATION of 24 November 2020, on vocational education and training (VET) for sustainable competitiveness, social fairness and resilience COM(2020) 275 final <https://data.consilium.europa.eu/doc/document/ST-13237-2020-INIT/en/pdf>

¹³ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52012PC0614>

¹⁴ <https://op.europa.eu/en/publication-detail/-/publication/24968221-eb81-11e5-8a81-01aa75ed71a1>

contributes to reducing the gender employment gap¹⁵.

I. Non-discrimination

Non-discrimination is a core principle in the European Union's legal framework, enshrined in various EU treaties and charters, such as the **Treaty on the Functioning of the European Union** and the **Charter of Fundamental Rights**. This principle asserts that individuals must not be discriminated against based on characteristics like race, gender, age, disability, sexual orientation, religion, or belief. The EU's commitment to non-discrimination seeks to ensure equal treatment and opportunities for all citizens within its member states.

The European Commission plays a crucial role in monitoring and ensuring that member states adhere to the principles of non-discrimination. It does this through various means, including drafting and enforcing directives and regulations, overseeing the implementation of EU law at the national level, and taking legal action against member states that fail to comply. The Commission also provides guidance and support to member states in developing and applying non-discrimination policies.

One notable example is the European Commission's action against age discrimination in the labor market. The **Employment Equality Directive (2000/78/EC)** exemplifies this effort by prohibiting discrimination based on age in the context of employment and vocational

training¹⁶. Another example is the **Gender Equality Directive (2006/54/EC)**, which focuses on equal treatment of men and women in employment-related matters¹⁷. These directives have led to significant legal cases and policy changes in various EU countries, demonstrating the EU's commitment to upholding non-discrimination across multiple facets of social and professional life.

J. Social inclusion

Social inclusion is a fundamental objective of the European Union, aimed at ensuring that all individuals have the opportunities and resources necessary to fully participate in economic, social, and cultural life and to enjoy a standard of living and wellbeing that is considered normal in the society in which they live. It is about preventing and addressing poverty, discrimination, and exclusion, and it encompasses a wide range of policies and initiatives.

The EU's commitment to social inclusion is rooted in various treaties and strategic documents, such as the Europe 2020 strategy, which set targets for reducing poverty and social exclusion. **The European Pillar of Social Rights**, proclaimed in 2017, represents a significant step forward in this area. It sets out 20 key principles and rights to support fair and well-functioning labor markets and welfare systems, including aspects of equal opportunities and access to the

¹⁵ Directive (EU) 2019/1158 of the European Parliament and of the Council of 20 June 2019 on work-life balance for parents and carers and repealing Council Directive 2010/18/EU (The Work-life Balance Directive) <http://data.europa.eu/eli/dir/2019/1158/oj>

¹⁶ Council Directive 2000/78/EC of 27 November 2000 establishing a general framework for equal treatment

in employment and occupation <http://data.europa.eu/eli/dir/2000/78/oj>

¹⁷ Directive 2006/54/EC of the European Parliament and of the Council of 5 July 2006 on the implementation of the principle of equal opportunities and equal treatment of men and women in matters of employment and occupation (recast) <http://data.europa.eu/eli/dir/2006/54/oj>

labor market, fair working conditions, and social protection and inclusion¹⁸.

In practice, EU policies and programs addressing social inclusion span a broad spectrum, from employment, education, and social policies to measures targeting specific groups such as the elderly, youth, migrants, and minorities. For instance, the **European Social Fund (ESF)** is one of the EU's main instruments for promoting social inclusion. It supports employment-related projects, including those aimed at reducing barriers to work for people with disabilities, improving access to education and training, and combating poverty and social exclusion.

Moreover, the EU's approach to social inclusion emphasizes the importance of active participation and engagement in society. This involves not just providing assistance or benefits but also empowering individuals and communities to participate fully in decision-making processes that affect their lives. For

example, the **European Regional Development Fund (ERDF)** supports projects that promote social inclusion through urban regeneration and community-led local development.

The EU's policy on social inclusion also recognizes the interconnectedness of various social issues and the need for integrated approaches. This is reflected in the concept of "inclusive growth," which combines economic, social, and territorial cohesion policies. The goal is not only to create more and better jobs but also to ensure that the benefits of growth are widely shared across all regions and among all citizens.

In summary, social inclusion in the EU context is about creating a society where everyone has the opportunity to participate fully and where no one is left behind. This value is fundamental to the EU's vision of a more cohesive, inclusive, and prosperous society.

2.2. Incorporation of the Shared Values in H2Excellence Project

In the H2Excellence project, these shared values are integral to achieving our goals within the CoVE environment as well as in the broader Green Hydrogen sector. The principles of diversity, gender equality, non-discrimination, and social inclusion are not only fundamental EU values but also crucial drivers for **innovation, productivity, and sustainable growth** in the H2Excellence project and the hydrogen sector at large. Studies indicate that a gender-diverse workforce in the renewable energy transition can promote sustainable practices, enhance women's opportunities, and empower communities¹⁹. Higher representation of women in the EU's energy sector could improve profits, drive innovation, and reduce organizational risks, benefiting both businesses and local economies²⁰. The following table illustrates the enhancement of innovation, competitiveness, and social responsibility through the implementation of these values in the hydrogen sector.

¹⁸<https://ec.europa.eu/social/main.jsp?catId=1226&langId=en>

¹⁹ Pearl-Martinez, R., & Stephens, J. (2016). Toward a gender diverse workforce in the renewable energy transition. *Sustainability: Science, Practice and Policy*, 12, 15 - 8.

<https://doi.org/10.1080/15487733.2016.11908149>

²⁰ Chatterji, M., & Chakrabarti, A. (2021). Gender and Conflict with Special Reference to Representation of Women in EU's Energy Sector.

<https://doi.org/10.1108/S1572-832320210000029010>.

Diversity	<p>In the hydrogen sector, a diverse workforce brings together varied perspectives, experiences, and skills, enhancing creativity and problem-solving capabilities. This diversity is particularly vital in a sector that is evolving rapidly and requires innovative solutions to technical, economic, and environmental challenges. In the context of the H2Excellence project, fostering diversity means tapping into a broader talent pool, promoting a variety of ideas and approaches, and thereby enhancing the project's overall quality and impact.</p>
Gender Equality	<p>The hydrogen industry, like many other technical fields, faces a gender imbalance. Gender equality in the H2Excellence project not only addresses this gap but also ensures a more inclusive and equitable work environment. By promoting gender equality, the project can benefit from the full range of talent and perspectives, which is essential for driving forward the innovations needed in the green energy sector. Gender-balanced teams have been shown to increase organizational performance and decision-making quality.</p>
Non-Discrimination	<p>Creating an environment where all project participants and stakeholders are treated fairly and given equal opportunities is fundamental to the success of H2Excellence. Non-discrimination policies and practices ensure that the project attracts and retains the best talent, regardless of their background. This is crucial in a sector that must adapt quickly to changing technologies and market demands. By fostering a culture of respect and equality, the project can improve employee satisfaction and productivity.</p>
Social Inclusion	<p>The principle of social inclusion is particularly relevant for the hydrogen sector, which plays a crucial role in the transition to a more sustainable and green economy. Ensuring that the benefits of this transition are widely shared and accessible to all segments of society is essential. In the H2Excellence project, this means developing strategies and practices that enable broad participation and access to the opportunities created by the hydrogen economy. This includes outreach to underrepresented groups, training and development programs, and initiatives that ensure the sector's growth is inclusive and equitable.</p>

Integrating these principles into the H2Excellence project and the wider hydrogen sector is not only a matter of aligning with EU directives but also a strategic approach to enhancing innovation, competitiveness, and social responsibility. By embracing diversity, gender equality, non-discrimination, and social inclusion, the project sets a precedent for the sector's future development and contributes to the broader goal of a sustainable and inclusive European economy.

Recent advancements in the Energy and specifically the hydrogen sector demonstrate a growing commitment to incorporating these EU shared values of gender inclusion and diversity, equity, and inclusion (DE&I) and include the following initiatives:

- Equality in Energy Transitions Initiative** under the International Energy Agency (IEA) and the Clean Energy Ministerial, aims to promote gender equality and diversity in clean energy sectors by 2030. The Initiative focuses on improving gender-specific data in energy, recognizing women in leadership through awards and ambassador programs, and facilitating networking and information exchange. Originating in 2010 (as C3E) and restructured in 2017 under the Technology Collaboration Programme, it collaborates with member countries and industries to advance energy technologies and workforce issues. Founding members include Canada, Sweden, and Italy²¹.

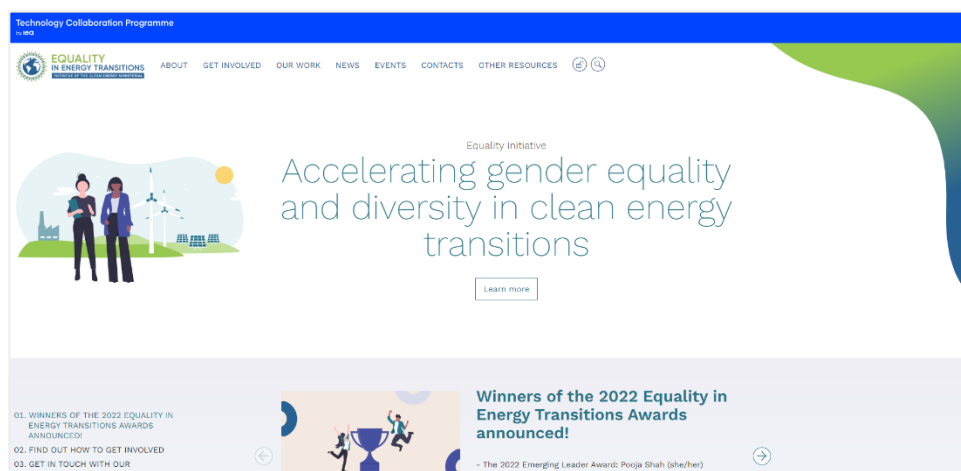


Figure 1 Equality in Energy Transitions Initiative Platform

- H2-DE&IA platform:** Launched in 2023, the H2-DEIA (Hydrogen Diversity, Equity, Inclusion, and Accessibility) initiative, a partnership between the International Partnership for Hydrogen and Fuel Cells in the Economy (IPHE) and the Hydrogen Council, aims to create a hydrogen and fuel cell economy that reflects global societal diversity and ensures equal opportunities for all²².
- Hydrogen Council's Focus on DE&I:** The Hydrogen Council has emphasized DE&I in the global hydrogen economy. Its SDG Compass for Hydrogen, launched at the COP28 Action Agenda on Hydrogen, aims to create strategic pathways for DE&I and contribute to the UN Sustainable Development Goals (SDGs)²³.
- IRENA's Advocacy for Workforce Readiness:** The International Renewable Energy Agency (IRENA) emphasizes a just and inclusive transition in the renewable sector, including hydrogen, promoting collaborative frameworks that prioritize workforce readiness and diversity²⁴.

²¹ <https://www.equality-energytransitions.org/>

²² <https://h2-deia.org>

²³ <https://hydrogencouncil.com/en/accelerating-sdgs-diversity-equity-and-inclusion-in-hydrogen/>

²⁴ <https://www.irena.org/Energy-Transition/Socio-economic-impact/Gender>

- **Positive Shift in Energy and Materials Industries:** According to the World Economic Forum Global Gender Gap Report 2023, the Energy and Materials industries are undergoing a positive shift towards more inclusive practices in gender equality and DE&I²⁵.

These developments in the hydrogen sector are not only in line with EU shared values but also represent a transformative approach to ensuring that the transition to a hydrogen-based economy is equitable, diverse, and inclusive. The H2Excellence project, by integrating these values and learning from these advancements, positions itself at the forefront of this transition, fostering a model for future developments in the sector.

“Working together, we can make real progress by 2025 in achieving a Europe where women and men, girls and boys, in all their diversity, are equal – where they are free to pursue their chosen path in life and reach their full potential, where they have equal opportunities to thrive, and where they can equally participate in and lead our European society.”

EU Gender Equality Strategy 2020-2025

²⁵ WEF (2023) *Global Gender Gap Report 2023*, p.55 https://www3.weforum.org/docs/WEF_GGGR_2023.pdf

3. Overview of the Current State of Diversity, Equity, and Inclusion (DE&I) in the Hydrogen Sector

3.1. Desktop survey

3.1.1 Lack of specific data

The current state of diversity, equity, and inclusion (DE&I) in the Hydrogen sector is not distinctly outlined in available research, indicating a lack of data specific to this area. The representation of women in the hydrogen sector, particularly in technical roles, leadership positions, and academia, remains largely unexplored in academic literature. Research papers predominantly focus on the technical, environmental, and economic aspects of hydrogen as an energy source, such as public opinions on hydrogen energy, its potential role in transportation, applications in hydrogen engines for automotive use, and its industrial uses across various sectors²⁶.

3.1.2 A broader perspective: Women's representation in the Energy Sector

However, insights into women's representation in the hydrogen sector can be inferred from the broader context of the energy sector. Studies indicate that **women are notably under-represented in the energy sector, and there is a recognized need for more support for women's careers in this field**²⁷. According to the International Labour Organization (ILO), women constitute 39% of the global workforce, yet their presence in traditional energy industries (oil, gas, and mining) is disproportionately lower, representing only 22% of the workforce in these fields (see infographic). This underrepresentation extends into leadership roles within the energy sector, where, according to studies by the International Renewable Energy Agency (IRENA) and the International Energy Agency (IEA), women occupy a mere 14% of executive positions in the oil and gas industry—a stark contrast to their overall participation rate. This disparity in representation is further echoed in pay scales. According to 2018 data from 29 countries, the gender wage gap in the energy sector, when accounting for skill level, stands at about -15%, indicating that women earn 15% less than their male counterparts. Comparatively, in the non-energy sector, the wage gap is marginally lower at -13%, as reported by the International Energy Agency (IEA)²⁸. While the renewable energy sector shows a slightly more inclusive picture with women making up 32% of its workforce, the number of women in executive roles remains low at only 10%. A 2010 study in countries like Germany, Spain, and Sweden, showed significant gaps in female representation in leadership roles energy companies. The study revealed that female representation in these roles is far from gender-equal, with

²⁶ See for example Cherryman et al., 2008; Acar & Dincer, 2020; Das, 2002; Ramachandran & Menon, 1998

²⁷ Clancy, J., & Roehr, U. (2003). Gender and energy: Is there a northern perspective? *Energy for Sustainable Development*, 7(3), 44–49 [https://doi.org/10.1016/S0973-0826\(08\)60364-6](https://doi.org/10.1016/S0973-0826(08)60364-6)

²⁸ Information derived from <https://www.iea.org/data-and-statistics/data-tools/gender-and-energy-data-explorer?Topic=Employment&Indicator=Gender+wage+gap+conditional+on+skills>

64% of surveyed companies having no women at all in such positions. Only 5% of the companies were considered gender-equal, having 40% or more women in board and management roles²⁹. These patterns suggest similar trends could be present in the hydrogen sector, underscoring the need for targeted initiatives to enhance gender diversity and inclusion. Relevant research indicates that the absence of suitable gender-analytic tools in energy project planning poses a barrier to gender mainstreaming and there is a need for improved methodologies in this area³⁰.

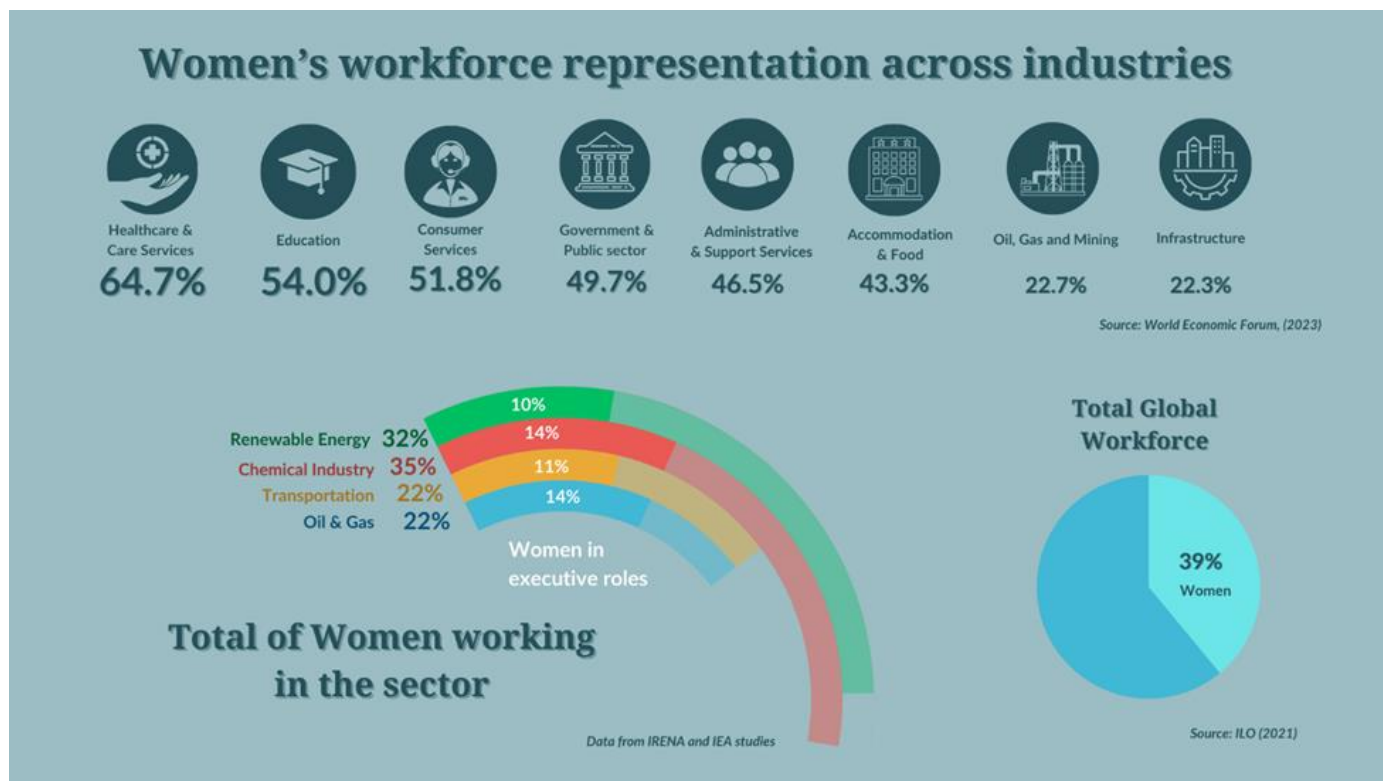


Figure 2 Infographic: Women's Workforce Representation

3.1.3 Disparity in STEM education: A key contributor to gender gap

Adding to these considerations, **women's underrepresentation in STEM education programs is a fundamental issue that contributes to the disparity in the hydrogen and energy sectors at large.** Despite women comprising 54% of those in postsecondary education, they only represent 27% of those in programs focused on science, technology, engineering, and mathematics (STEM), which are critical for

²⁹ Carlsson-Kanyama, A., Ripa Juliá, I., & Röhr, U. (2010). Unequal representation of women and men in energy company boards and management groups: Are there implications for mitigation? *Energy Policy*, 38(8), 4737–4740.

³⁰ Skutsch, M. (2005). Gender analysis for energy projects and programmes. *Energy for Sustainable Development*, 9(1), 37-52. [https://doi.org/10.1016/S0973-0826\(08\)60481-0](https://doi.org/10.1016/S0973-0826(08)60481-0)

careers in technical areas of the industry. This systemic issue is evidenced also in higher education, where women are a minority of students in STEM education, representing only 35%³¹.

WOMEN IN STEM PROGRAMS BY REGION

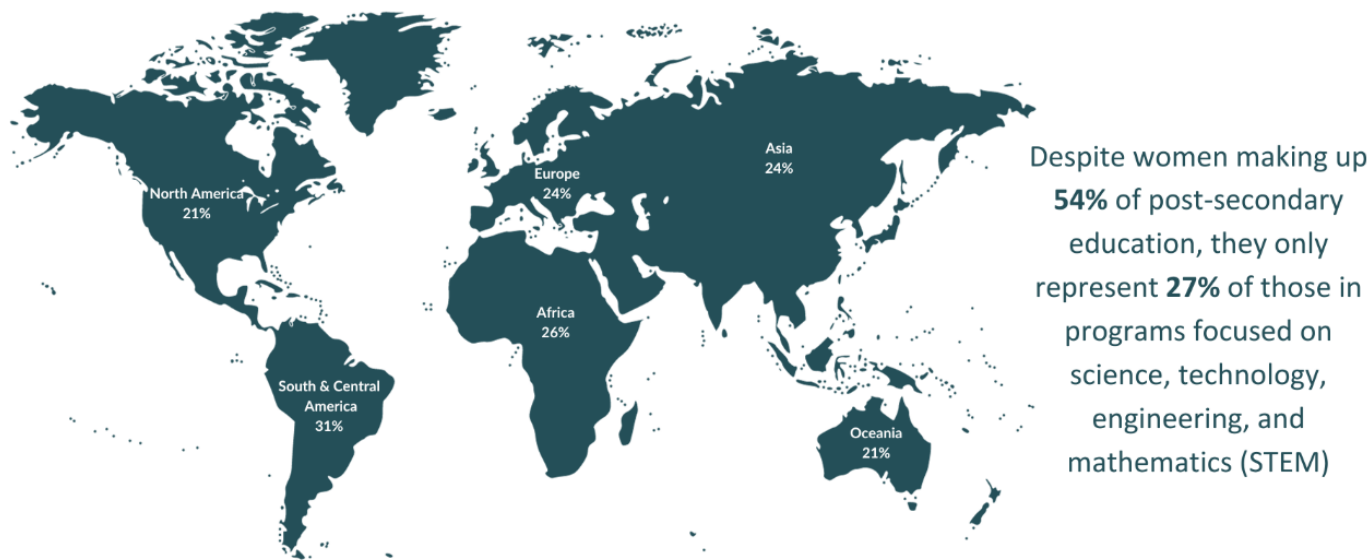


Figure 3 Women in STEM Programmes by Region, data 2017 taken from Republic of South Africa, Mineral Resources and Energy Department (2021) Publication "Women Empowerment & Gender Equality Strategy for the Energy Sector 2021-2025".

In the context of the CoVE countries participating in the H2Excellence project, the examination of women's participation in STEM education and vocational training shows varied results across the region (see figure 4).

Finland displays a high gender parity in health and welfare, with women considerably outnumbering men. However, STEM graduates' gender parity is lower, with 27.40% female and 72.60% male graduates, resulting in a parity value of 0.38. In natural sciences, mathematics, and statistics, the parity is more favorable at 1.17, but in engineering, manufacturing, and construction, the parity drops to 0.28.

France shows a gender parity of 0.47 in STEM graduates with 31.81% female and 68.19% male graduates. In natural sciences, mathematics, and statistics, the parity is higher at 1.20, indicating a higher proportion of female graduates. However, in health and welfare, the parity is 2.84, showing a significant majority of female graduates, whereas in engineering, manufacturing, and construction, the parity is much lower at 0.35.

³¹ UN (2022) "Progress on the Sustainable Development Goals: The gender snapshot 2022," UN Women and United Nations Department of Economic and Social Affairs, Statistics Division
https://www.unwomen.org/sites/default/files/2022-09/Progress-on-the-sustainable-development-goals-the-gender-snapshot-2022-en_0.pdf

Italy's data, while missing for STEM as well as engineering, manufacturing, and construction, shows a positive parity for women in natural sciences, mathematics, and statistics at 1.38, suggesting more female graduates than male in these fields.

Spain presents a trend where more women graduate in health and welfare than men, with a gender parity of 2.15, and a balanced presence in natural sciences, mathematics, and statistics with a parity of 1.00. Yet, the proportion of female STEM graduates is lower at 29.56%, with a gender parity of 0.42, and in engineering, manufacturing, and construction, the gender gap is evident with a parity of 0.36.

Portugal features a high gender parity in general education at 4.00, showing a strong female dominance, but lacks data for STEM fields. The disparities in vocational training across all countries, including Portugal, indicate lower female participation rates with parity values below 1.

Poland, not previously mentioned, also reflects this mixed landscape. STEM graduates have a gender parity of 0.31, with only 31.73% female graduates. The parity in natural sciences, mathematics, and statistics is 2.29, showing a higher percentage of females, whereas in engineering, manufacturing, and construction, the parity is 0.73, indicating fewer female graduates. Health and welfare see a high parity of 2.59, indicative of many more female than male graduates, while vocational training has a lower parity of 0.71, suggesting less female involvement.

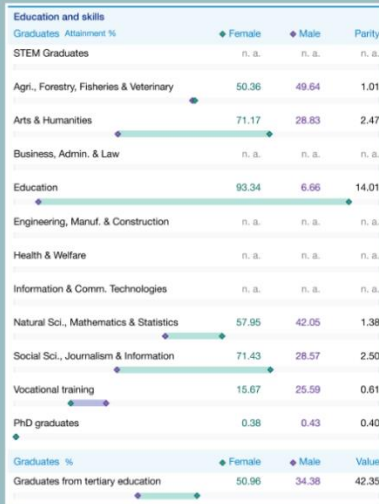
The data underlines the fact that while some fields like health and welfare and natural sciences show higher female participation and even dominance in certain countries, STEM and engineering fields generally have lower female representation, with vocational training also lagging in female participation across these CoVE countries.

This significant discrepancy suggests that while women are well-represented in certain academic sectors, there is a considerable gender gap in core STEM areas that form the educational backbone for careers in the hydrogen sector and other technologically driven industries. This gender gap is a clear indicator of the challenges that women face in entering and thriving within technical domains that are critical to the development and expansion of the hydrogen economy. This comprehensive educational landscape across the CoVE countries underscores the potential for increased female inclusion in the hydrogen sector, yet it also highlights the necessity for targeted educational and vocational pathways to ensure a diverse and equitable energy future.

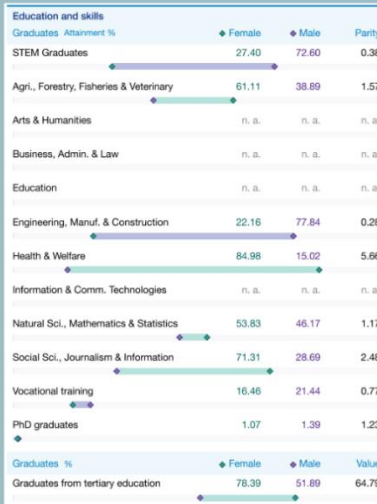
Education and skills in the CoVE countries

(Graduates Attainment %, Female - Male Parity)

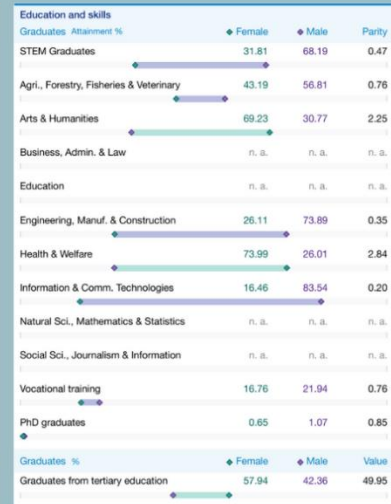
ITALY



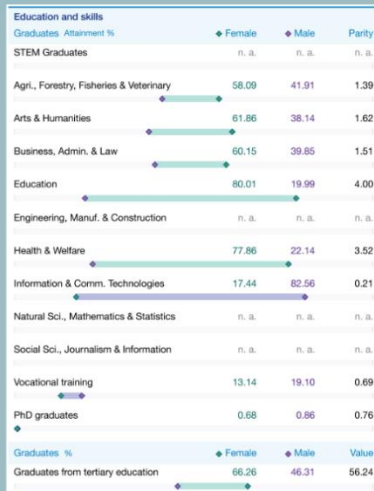
FINLAND



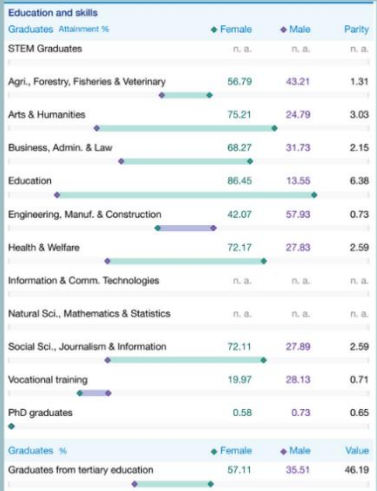
FRANCE



PORTUGAL



POLAND



SPAIN



Figure 4 Source World Economic Forum, Global Gender Gap Report 2023

3.1.4 Retention of women in STEM occupations

This shortfall is further amplified by biased gender norms and stereotypes, which deter girls from pursuing STEM studies and careers. It begins early in education, sustained by cultural expectations and stereotypes about “women's work,” and continues into higher education and the workforce, where women remain vastly outnumbered in STEM professions. A closer look at STEM occupations, which are well-remunerated and expected to grow significantly in the future, reveals that **women remain significantly underrepresented in the STEM workforce**. While women make up almost half (49.3%) of total employment across non-STEM occupations, they constitute only 29.2% of all STEM workers. However, there has been an increase in the fraction of women in STEM jobs, growing by 1.58 percentage points from 27.6% in 2015, outpacing the growth for non-STEM jobs.

The transition from university to the world of work is a critical point for intervention. Despite a growing percentage of female STEM graduates entering into STEM employment, there is **a notable drop in the retention of women in STEM one year after graduating**. For example, among those graduating with a STEM degree in 2017, 35.5% were women, but a year after graduation, only 29.6% of those holding STEM jobs were women. This represents a drop of 5.9 percentage points. By 2021, women comprised 38.5% of STEM degree recipients, yet only 31.6% of these women remained in STEM occupations a year later—a drop of 6.9 percentage points. Notably, once in the workforce, women are less likely to leave in the first years, unless they begin to advance in the hierarchy where the disparity widens.

Women tend to be underrepresented in leadership roles, especially within STEM fields. They account for 29.4% of entry-level workers and 29.9% of senior workers, but this share drops to one-quarter (25.5% and 26.7%, respectively) for Manager or Director positions. The representation of women in higher-level leadership roles, such as VP and C-suite, falls even further to 17.8% and 12.4%, respectively. These numbers clearly illustrate the “drop to the top,” where female representation declines sharply as the seniority level increases, underscoring the need to address the barriers that prevent women from ascending within STEM fields.

3.1.5 Beyond gender: Intersectionality and Diverse Groups

While the primary focus of this report is on gender disparities in the hydrogen and energy sector, it is imperative to recognize that gender is not the sole characteristic contributing to inequalities. Intersectionality, a concept that encompasses various aspects of personal identity such as race, nationality, socio-economic background, and sexual orientation, plays a crucial role in shaping these disparities. For instance, in the energy sector, women constitute only 22% of the workforce, and within this group, only one out of every ten professionals is of non-white ethnicity³². This intersection of being a woman and non-white places individuals in an even more disadvantaged position.

³² Information derived from <https://diversityq.com/why-the-energy-sector-needs-diversity-equality-and-inclusion/>

Intersectionality is a framework for understanding how aspects of a person's social and political identities combine to create different modes of discrimination and privilege³³. Studies show that intersectionality, including biases against women and ethnic and racial minorities, significantly contributes to inequalities in STEM education and employment³⁴. These findings underscore the importance of considering intersectionality when researching gender inequalities and developing inclusion plans.

Beyond gender we have to address specific factors related to health problems and disabilities, ethnicity and cultural difference, socio-economic barriers, geographical barriers and other unique challenges faced by people with fewer opportunities³⁵:

- A. **People with Disabilities:** They encounter barriers in STEM due to lack of educator understanding, limited exposure to mentors, negative attitudes, and limited access to required technologies³⁶.
- B. **Migrants and Ethnic Minorities:** These groups face barriers due to systemic issues in recruitment and retention, and experience disparities in STEM fields. Ethnicity and socioeconomic status also impact their career progression³⁷.
- C. **People from Low-Income Backgrounds:** They are disproportionately affected by psychosocial barriers in STEM programming and face challenges in participating in engineering education due to financial pressure and curriculum overload³⁸.
- D. **Rural Youth:** Rural students lack access to advanced STEM coursework needed for educational and career goals and they also face barriers due to limited role models and technology access³⁹.

³³ EIGE defines Intersectionality as “the analytical tool for studying, understanding and responding to the ways in which sex and gender intersect with other personal characteristics/identities, and how these intersections contribute to unique experiences of discrimination”. It starts from the premise that people live multiple, layered identities derived from social relations, history and the operation of structures of power. Intersectional analysis aims to reveal multiple identities, exposing the different types of intersectional and multiple discrimination and disadvantage that occur as a consequence of the combination of identities and the intersection of sex and gender with other grounds. EIGE Glossary and thesaurus:

<https://eige.europa.eu/publications-resources/thesaurus/terms/1050>

³⁴ Ford, H., Brick, C., Blaufuss, K., & Dekens, P. (2018). Gender inequity in speaking opportunities at the American Geophysical Union Fall Meeting. *Nature Communications*, 9. <https://doi.org/10.1038/s41467-018-03809-5>

³⁵ For a definition on the terms “people with fewer opportunities” as well as the barriers in accessibility and outreach from participating in social and economic life see the Erasmus+ Inclusion and Diversity Strategy guidelines report (2021) pp. 9-11. <https://erasmus-plus.ec.europa.eu/document/implementation-guidelines-erasmus-and-european-solidarity-corps-inclusion-and-diversity-strategy>

³⁶ Sukhai, M., & Mohler, C. (2017). Barriers faced by students with disabilities in science laboratory and practical space settings., 25-39. <https://doi.org/10.1016/B978-0-12-804037-9.00003-6>

³⁷ For an intersectional analysis of minority status and disability see Hawley, C., Cardoso, E., & McMahon, B. (2013). Adolescence to adulthood in STEM education and career development: The experience of students at the intersection of underrepresented minority status and disability. *Journal of Vocational Rehabilitation*, 39, 193-204. <https://doi.org/10.3233/JVR-130655>.

³⁸ Duodu, E., Noble, J., Yusuf, Y., Garay, C., & Bean, C. (2017). Understanding the delivery of a Canadian-based after-school STEM program: a case study. *International Journal of STEM Education*, 4. <https://doi.org/10.1186/s40594-017-0083-2>

³⁹ Ihrig, L., Lane, E., Mahatmya, D., & Assouline, S. (2018). STEM Excellence and Leadership Program: Increasing the Level of STEM Challenge and Engagement for High-Achieving Students in Economically Disadvantaged Rural Communities. *Journal for the Education of the Gifted*, 41, 24 - 42. <https://doi.org/10.1177/0162353217745158>

- E. **LGBTQ+ Youth:** LGBTQ+ individuals in STEM fields frequently encounter discrimination, leading to underrepresentation and high attrition rates in these fields⁴⁰.
- F. **Young People with Lower Socioeconomic Backgrounds or/and Academic Attainment:** They face barriers in promoting STEM careers, such as a lack of role models and understanding of career opportunities, and are less likely to study STEM subjects and attend prestigious universities⁴¹.
- G. **Young People from Disadvantaged Neighborhoods:** These students often lack access to educational opportunities in STEM, impacting impoverished neighborhoods the hardest⁴².
- H. **Young People from Roma Communities:** Roma students are underrepresented in STEM fields and face multiple risks and disadvantages, including limited access to education and employment⁴³.
- I. **Young People from Other Ethnic and Linguistic Minority Groups:** They encounter similar barriers as migrants and ethnic minorities, such as systemic recruitment and retention issues in STEM education and careers⁴⁴.

These findings highlight the need for targeted interventions and support to address the unique barriers faced by each of these groups in STEM fields.

The intersectionality framework reveals the complex interplay of various identity factors, significantly impacting individuals' opportunities and experiences in education and employment, particularly in STEM fields and sectors like hydrogen and energy. Recognizing and addressing these intersectional challenges is crucial for developing effective selection criteria and inclusion strategies for the participation of women and other underrepresented groups in the project activities. This approach is essential to ensure maximum results and a more equitable and diverse future in the Green Hydrogen Sector.

3.1.6 A ray of hope: Positive shifts in Energy Sector

The World Economic Forum's *Future of Jobs Report 2023* highlights an encouraging trend in the energy sector as it is among the top five sectors actively investing in DE&I initiatives. This commitment is particularly noteworthy as it represents a significant shift towards gender inclusivity in an industry where women have historically been underrepresented. According to the report, over 31% of companies in the energy and materials sector are now implementing DE&I programs, with a remarkable 91% of these

⁴⁰ Xevgeni, E. et. al. (2023) D2.1 Desk research and collection of best practices to END GBV in educational structure, from END GBV in VET – “Full service to increase capacity and awareness for disrupting gender-based violence in the VET sphere” Project 101049592 — CERV-2021-DAPHNE

https://endgbv-in-vet.eu/wp-content/uploads/2023/05/END_GBV_In_VET-D2.1_Transnational_Report-FINAL.pdf

⁴¹ See for example the following case study by Carrico, C., Murzi, H., & Matusovich, H. (2016). The roles of socializers in career choice decisions for high school students in rural central Appalachia: “Who's doing what?”. 2016 IEEE Frontiers in Education Conference (FIE), 1-6. <https://doi.org/10.1109/FIE.2016.7757722>

⁴² Huderson, B., & Huderson, A. (2019). Urban STEM Education. *Advances in Early Childhood and K-12 Education*. <https://doi.org/10.4018/978-1-5225-7814-7.CH001>

⁴³ Garaz, S., & Torotcoi, S. (2017). Increasing Access to Higher Education and the Reproduction of Social Inequalities: The Case of Roma University Students in Eastern and Southeastern Europe. *European Education*, 49, 10 - 35. <https://doi.org/10.1080/10564934.2017.1280334>

⁴⁴ Hawley, C., Cardoso, E., & McMahon, B. (2013). Adolescence to adulthood in STEM education and career development: The experience of students at the intersection of underrepresented minority status and disability. *Journal of Vocational Rehabilitation*, 39, 193-204. <https://doi.org/10.3233/JVR-130655>

initiatives specifically targeting gender parity issues. This progressive move in the energy sector is seen as a beacon of hope, signifying a transformative approach towards achieving a more balanced and inclusive workforce. The emphasis on mentoring, leadership training, and flexible working arrangements, especially tailored for women, reflects a broader understanding of the unique challenges they face in the workplace. These efforts, when effectively implemented, could pave the way for more women to advance in their careers and attain senior roles within the energy sector, ultimately leading to a more equitable and diverse industry landscape.

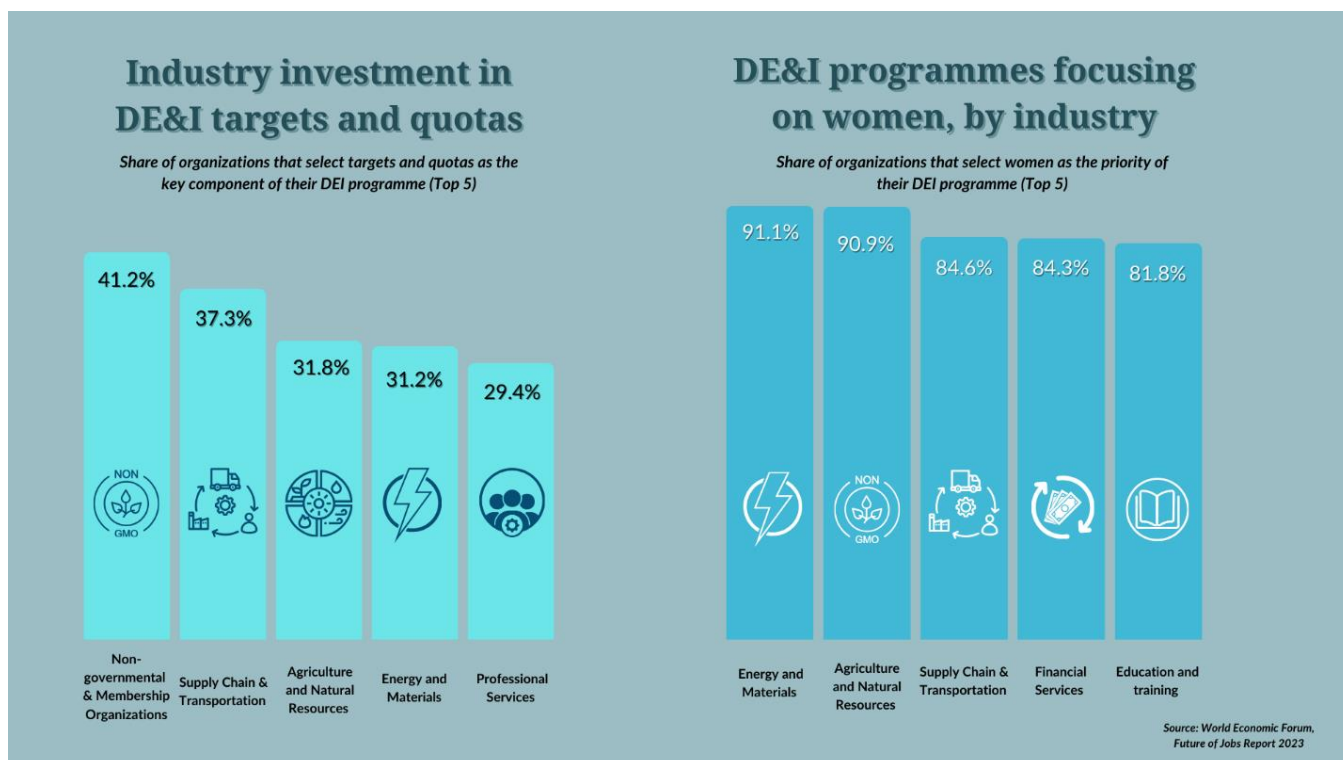


Figure 5 Industry and Sector investment in DE&I, Source: WEF

3.2. The H2Excellence Gender Inclusion survey

In order to have a closer look on the state of Diversity, Equity, and Inclusion (DE&I) within the H2Excellence CoVE environment we implemented a survey that was distributed to all consortium members. 16 answers were reported providing us with valuable information. The insights from this survey reveal significant areas of gender disparity within the hydrogen sector and identify deeply rooted societal and cultural barriers that need to be addressed. These findings will inform the development of targeted actions within the H2Excellence project to promote gender equality and create a more inclusive work environment. The results will also serve as a basis for crafting effective interventions and policies that can mitigate these barriers and support the active participation and advancement of women in the hydrogen sector.

3.2.1 General information on survey respondents

1. **Diversity of Stakeholders:** The survey respondents represent a rich tapestry of organization types engaged in the hydrogen sector, including *R&D organizations, industry players, clusters, VET providers, universities, associations, and federations*. This mix underscores the collaborative nature of the H2Excellence project, pooling expertise from various corners of the field. Universities and VET providers, provide insight into the educational aspect of the hydrogen sector. Their involvement is crucial for integrating DE&I principles into the curricula and training programs, shaping the next generation of the workforce.

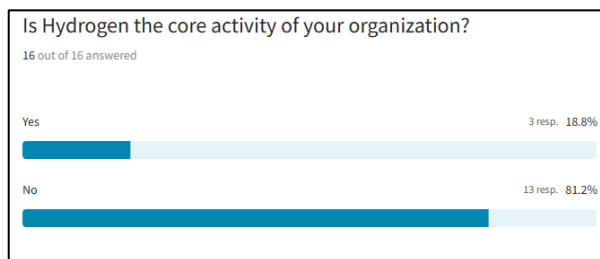
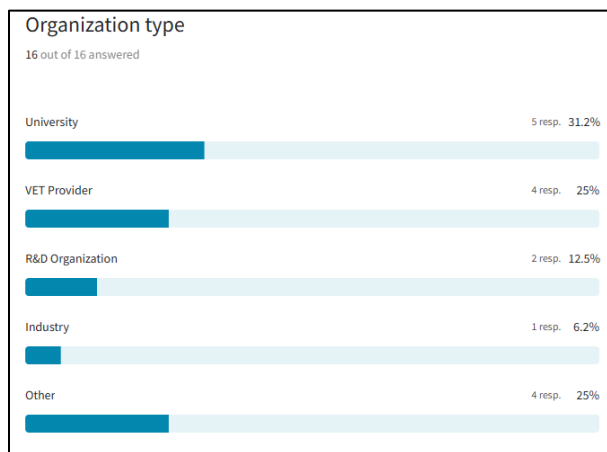


Figure 6 Core Activity, H2Excellence Gender Inclusion Survey

Figure 7 Organization Type, H2Excellence Gender Inclusion Survey

2. Core Activity and Employment:

- **Hydrogen Focus:** The survey covered a spectrum of organizations not solely focused on hydrogen, highlighting the interdisciplinary nature of the H2Excellence project and the potential for cross-sectoral learning and application of DE&I guidelines. Most R&D organizations indicate that hydrogen is a core activity, which is indicative of the sector's innovation drive and its importance in their operational focus.

- **Employment Statistics:** The number of employees across organizations varies widely, from small entities with 4 employees to larger ones with over 10,000 employees. Such diversity in organization size may influence the scalability and applicability of DE&I practices.

3. Gender Representation:

- **Female Representation:** There is a notable range in female representation across organizations. For instance, a large size Organization with hydrogen as a core activity has 511 female employees out of 1221, suggesting a significant presence of women in the organization. However, smaller organizations or those with no hydrogen as a core activity report fewer female employees, which may reflect sector-wide trends in gender disparity.
- **Respondent Roles:** The survey responses were provided by individuals in various roles, many in positions of responsibility *related to equality, human resources, and international affairs*. This indicates that the data is being provided by those with knowledge of and influence over DE&I practices within their organizations.
- **Gender of Respondents:** The majority of respondents identified as female, which could imply a strong interest or involvement of women in DE&I initiatives within their organizations. It is essential to note, however, that this may not necessarily reflect the overall gender distribution within these sectors.

3.2.2. Understanding the gap

Based on the responses received from the 16 participants, we can summarize the findings for questions exploring gender disparity in various roles within the hydrogen sector and identifies the primary barriers to women's participation.

a. Roles with Gender Disparity

The survey results indicate that gender disparity is most pronounced in the following roles:

1. **Installation, Maintenance, and Repair Technicians:** 87.5% of respondents identified this as the role with the most significant gender disparity, which suggests that hands-on technical positions are heavily male-dominated.
2. **Management Occupations:** 62.5% of respondents noted a gender gap in management roles, indicating that leadership positions may not be as accessible to women.

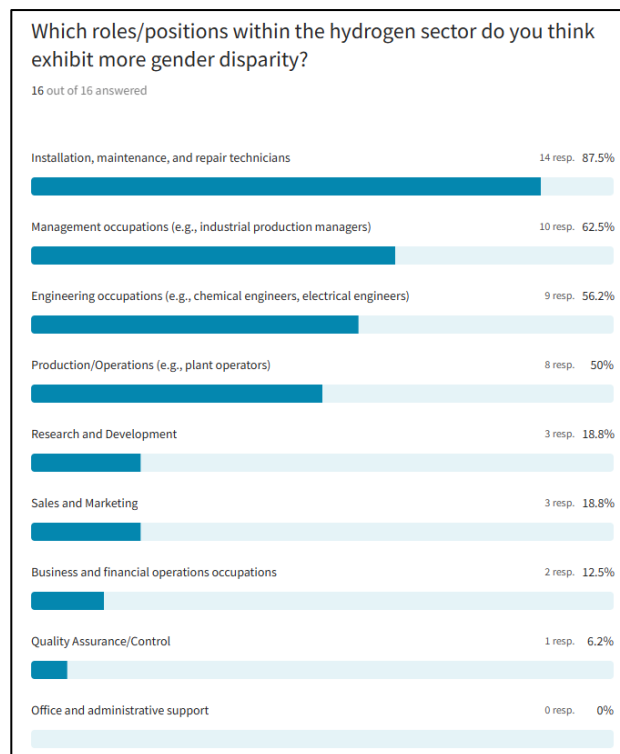


Figure 8 Disparity in H2 roles, H2Excellence Gender Inclusion Survey

3. **Engineering Occupations:** More than half of the participants (56.2%) acknowledged gender disparity in engineering roles, which are typically central to the hydrogen sector.
4. **Production/Operations:** Exactly half of the respondents saw a disparity in this category, indicating that operational roles in plant settings are skewed towards male employees.

The least disparity was observed in roles related to **Quality Assurance/Control and Office and Administrative Support**, with very few respondents indicating these as areas of concern.

b. Primary Barriers to Women's Participation

Respondents highlighted several barriers that prevent the participation of women in the hydrogen sector:

- **Stereotypes and Prejudices:** Cultural and workplace stereotypes about gender roles were frequently mentioned, along with a lack of representation in leadership positions.
- **Work-Life Balance:** The challenge of balancing personal life with work in a demanding industry is seen as a barrier for women.
- **Underrepresentation in STEM:** The underrepresentation of women in STEM fields limits the available talent pool for the hydrogen sector. This underrepresentation is attributed to societal expectations and cultural norms.
- **Emerging Sector Dynamics:** As hydrogen is an underdeveloped sector, existing gender imbalances in more established technical industries are likely mirrored here.
- **Perceptions of Suitability:** There is a belief that women might not be suitable for certain tasks, especially those linked to the production chain, and may struggle with work/life balance.
- **Educational Choices:** A noted trend in some countries, such as Finland, is that fewer women choose to study engineering, even if they study other STEM subjects.

The insights from this section reveal significant areas of gender disparity within the hydrogen sector and identify deeply rooted societal and cultural barriers that need to be addressed. These findings will inform the development of targeted actions within the H2Excellence project to promote gender equality and create a more inclusive work environment. The results will also serve as a basis for crafting effective interventions and policies that can mitigate these barriers and support the active participation and advancement of women in the hydrogen sector.

Which roles/positions within the hydrogen sector do you think exhibit more gender disparity?



1 Installation, maintenance, and repair technicians



2 Management occupations (e.g. industrial production managers)



3 Engineering occupations (e.g. chemical engineers, electrical engineers)

Primary barriers preventing the participation of women

"The hydrogen sector, like many other technology-intensive industries, requires a strong background in science, technology, engineering, and mathematics (STEM). Historically, women have been underrepresented in these fields, limiting the pool of female talent available for roles in the hydrogen sector. Societal expectations and cultural norms may discourage women from pursuing careers in certain industries, including the hydrogen sector. Overcoming these challenges requires changing societal attitudes and promoting inclusivity."

"While in the hydrogen research sector women are quite well represented, at industrial level women face more difficulty to be engaged with respect to men and hardly reach top management positions. Probably this is due to the belief that women are not able to ensure a proper work/life balance and are not suitable for tasks linked to the production chain."

"Role stereotypes"

"The culture of a male work."

"As an emerging sector I think that the problem is similar to other sectors"

Figure 9 Disparity roles and Primary barriers answers, H2Excellence Gender Inclusion Survey

3.2.3 Existing Gender Equality & Diversity mechanisms

The responses indicate the prevalence of various mechanisms within the participating organizations to promote gender equality and diversity. Here's an analysis of the responses:

a. Mechanisms in Place for Gender Equality and Diversity

1. **Flexible Work Arrangements:** The most common mechanism, with 75% of respondents indicating its presence, suggests a recognition of the need for work-life balance as a key factor in promoting gender equality.
2. **Inclusive Recruitment Strategies:** Implemented by 68.8% of organizations, these strategies are crucial for ensuring diverse talent pools and equitable hiring practices.
3. **Gender Sensitivity Training and Transparent Promotion and Pay Policies:** Each noted by 37.5% of respondents, these mechanisms are important for creating awareness and fairness within organizational structures.
4. **Diversity and Inclusion Committees:** Present in 31.2% of organizations, these committees signify a formal approach to managing and promoting DE&I initiatives.

5. **Mentorship and Networking Programs:** Noted by 18.8%, these programs can be instrumental in career development and opening opportunities for underrepresented groups.

6. **Employee Resource Groups and Unconscious Bias Training:** Both mechanisms, indicated by 12.5% of respondents, are foundational for supporting diverse groups and addressing underlying biases.

The “other” is specified by micro-SMEs lacking practices due to their size, highlights the need for scalable and adaptable DE&I strategies.

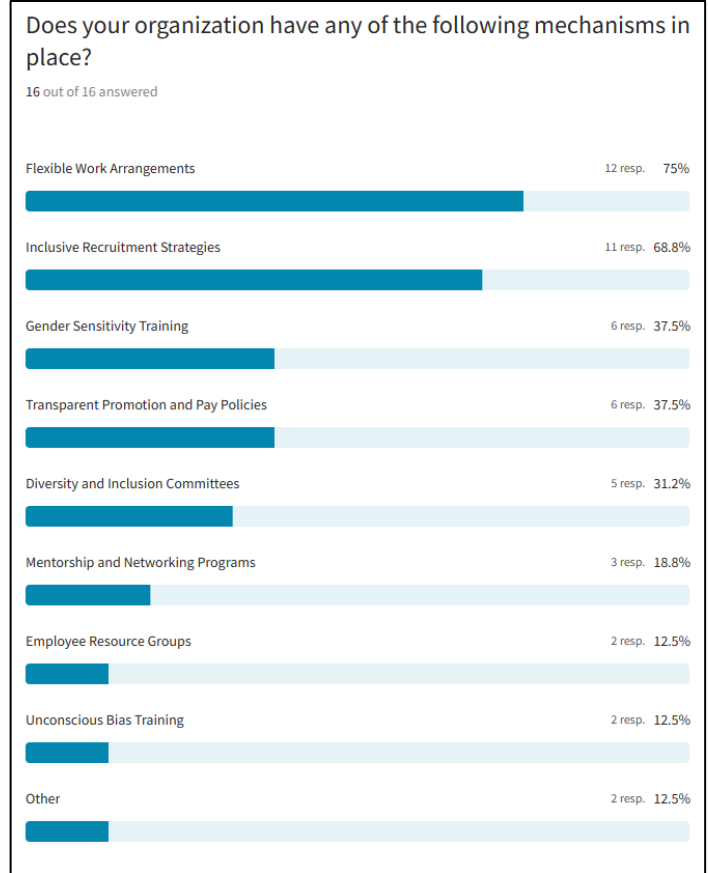


Figure 10 DE&I Mechanisms among Cove Organizations, H2Excellence Gender Inclusion Survey

b. Criteria for Ensuring Diversity, Equality, and Representation

1. **Skill-based Assessment:** Used by 68.8% of respondents, emphasizing the focus on meritocratic principles in the selection process.
2. **Equal Pay for Equal Work Assessment and Gender-neutral Job Descriptions:** Each highlighted by 56.2% of organizations, these criteria are vital for fair and unbiased selection.
3. **Inclusive Job Advertisements:** Employed by 50%, these are important for attracting a diverse range of candidates.
4. **Inclusive Promotion Policies and Diverse Interview Panels:** Noted by 37.5% and 31.2% respectively, these policies are essential for internal equity and diversity in hiring processes.
5. **Outreach Recruitment Programs:** Indicated by 18.8%, suggesting efforts to reach potential candidates in underrepresented communities.
6. **Representation Targets:** Utilized by 12.5%, these targets can drive efforts to balance gender representation, but may not be widely adopted due to various challenges.

The absence of diverse shortlists (0%) could point to an area for improvement in recruitment strategies. “Other” choice is specified as “availability” without providing more clarifications.

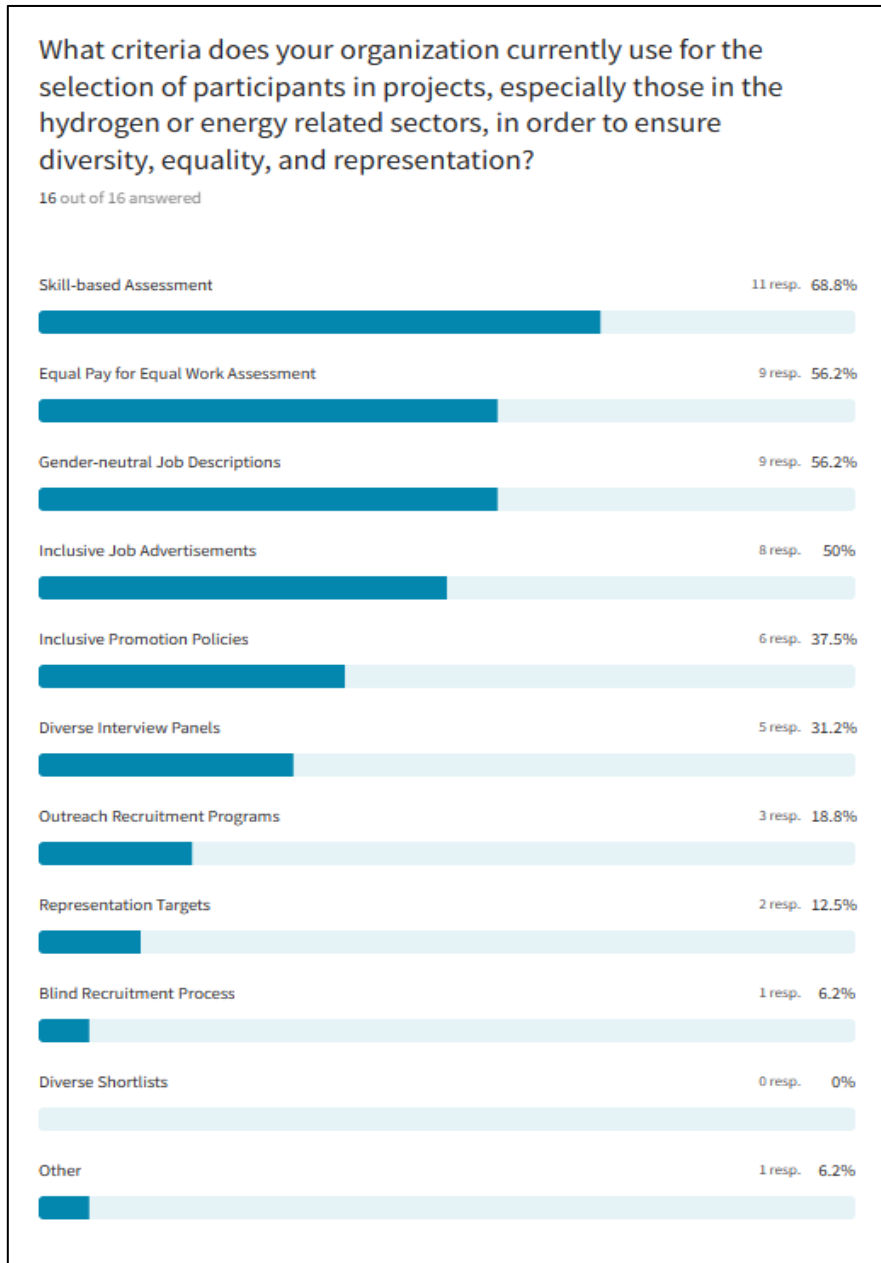


Figure 11 Recruitment Criteria among Cove Organizations, H2Excellence Gender Inclusion Survey

c. Initiatives to Promote Gender Equality and Social Inclusion

The listed initiatives vary widely but include:

- Ensuring parity in selection committees and integrating gender equality matters into selection processes.
- Avoiding discriminatory language in selection.
- Promoting equal participation in research teams and leadership roles.

- *Training and events specific to DE&I, with some organizations highlighting a significant female representation internally.*
- *Flexible hours and smart working arrangements.*

Some respondents noted the inherent equality in their national systems, while others highlighted specific campaigns, committees, and training activities aimed at fostering inclusion.

This data underscores the ongoing efforts and commitment to DE&I among the respondents, as well as the need for continued development and implementation of inclusive practices tailored to the hydrogen sector. It also suggests potential areas for the H2Excellence project to focus on when developing its Inclusion Package, such as addressing the challenges faced by smaller organizations or enhancing recruitment strategies to create diverse shortlists.



Figure 12 Infographic of Gender Inclusion Initiatives, H2Excellence Gender Inclusion Survey

3.2.4 Monitoring and evaluation

Key Performance Indicators (KPIs) organizations use to monitor and evaluate their inclusion and diversity efforts, as well as the frequency at which these KPIs are reviewed.

a. KPIs Used for Monitoring Inclusion and Diversity Efforts

The most commonly used KPIs, each cited by 37.5% of respondents, are:

- **Diversity Across Organization Levels:** Organizations assess the representation of diverse individuals across different levels, which is crucial for ensuring inclusivity is not confined to entry-level positions.

- **Equal Pay and Pay Equity:** Monitoring pay parity among employees is a vital measure of how organizations are upholding principles of fairness and equity.

Other notable KPIs, each cited by 25% of respondents, include:

- **Candidate Demographics:** Tracking the diversity of job applicants helps organizations understand the appeal and reach of their recruitment efforts.
- **Diversity of Applicant Pool:** This KPI ensures a diverse range of candidates are considered for positions, which can influence the organization's culture and performance.
- **Diversity of Hiring Panel:** A diverse hiring panel can reduce bias in the selection process, promoting fairer hiring practices.
- **Employee Resource Group (ERG) Participation:** Monitoring ERG participation can offer insights into the engagement and support of diverse groups within an organization.

Other KPIs, such as employee advancement/promotion rates, employee loyalty (eNPS), and retention rates, provide further layers of understanding regarding inclusivity in the workplace but were less frequently mentioned.

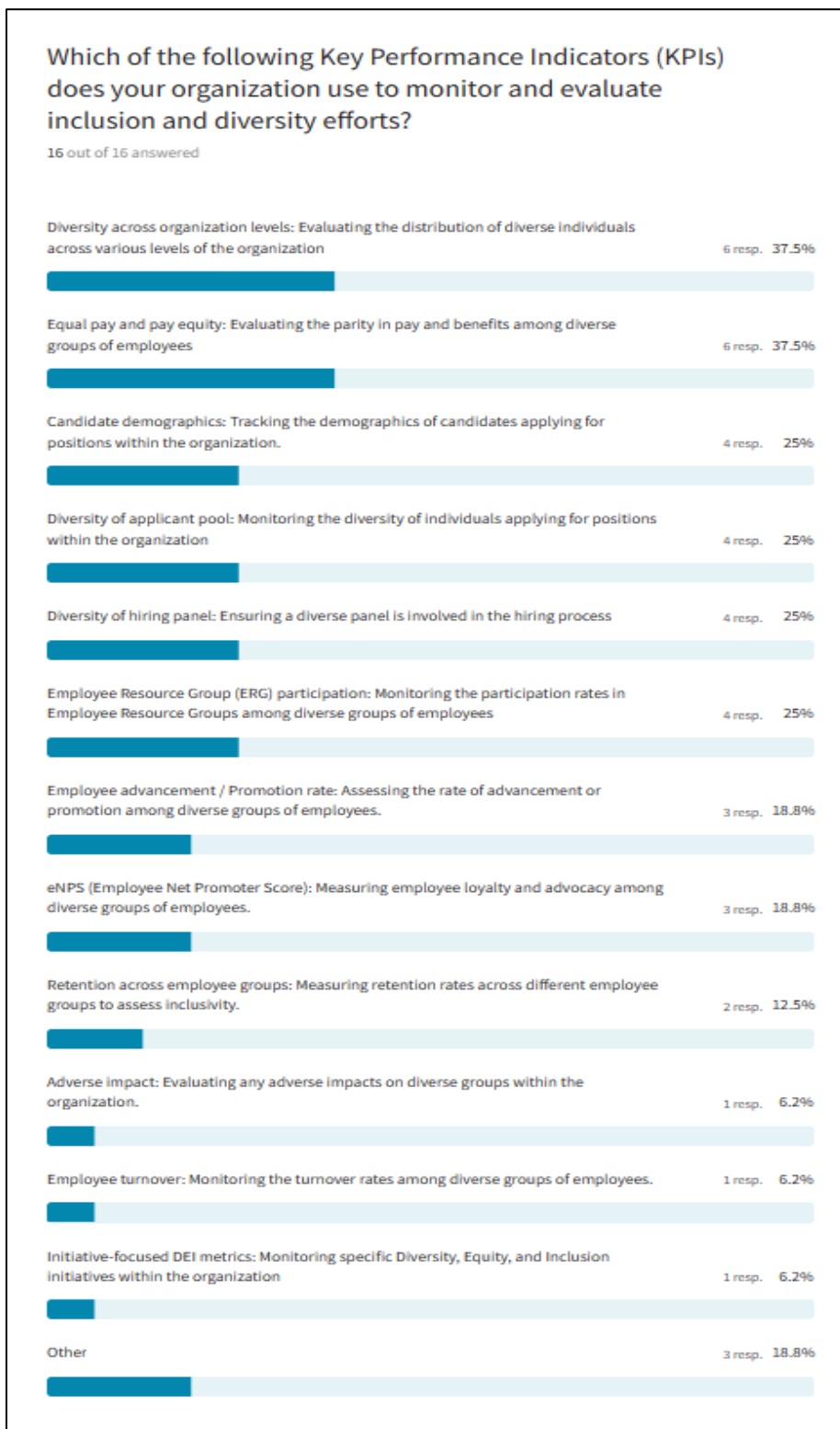


Figure 13 DE&I KPIs used among Cove Organizations, H2Excellence Gender Inclusion Survey

b. Review Frequency of KPIs

- Annually:** The most common review frequency, cited by 43.8% of respondents, suggests that organizations tend to evaluate their DE&I efforts on a yearly basis, which may align with annual reporting cycles.
- “Other” Specified Frequencies:** 18.8% of the respondents indicated various review frequencies, some of which are not on a regular schedule, such as biannually or occasionally. This suggests a lack of standardized practices across the partnership and could indicate potential areas for improvement in regular monitoring.
- Quarterly and Monthly:** These frequencies were less common, with quarterly reviews at 6.3% and no monthly reviews reported. This could imply that DE&I efforts are considered long-term objectives rather than immediate performance metrics.

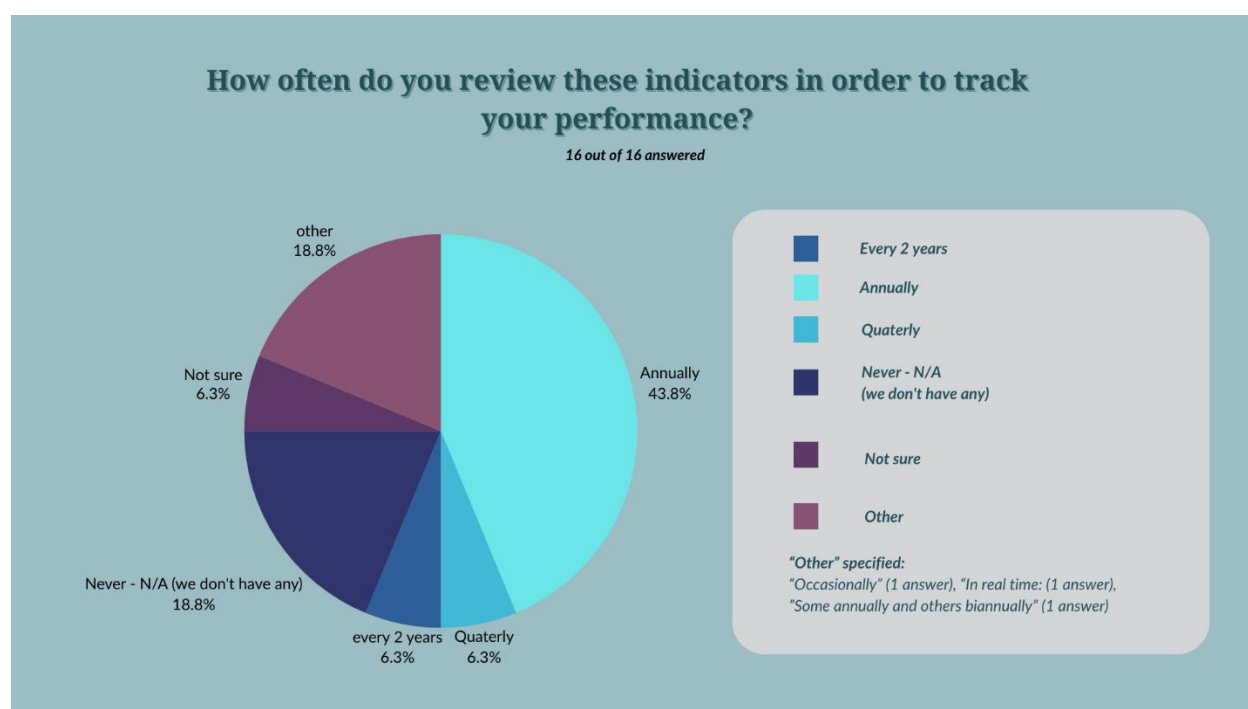


Figure 14 Monitoring frequency of KPIs, H2Excellence Gender Inclusion Survey

The additional comments specifying that some organizations **do not apply these KPIs (18.8%) or are unaware of their implementation (6.3%)** highlight a gap in DE&I monitoring practices. This is an area where the H2Excellence project could make a significant impact by providing guidance on establishing effective DE&I metrics and promoting regular monitoring to ensure ongoing improvement.

Overall, the data illustrates a need for more consistent and frequent monitoring of DE&I efforts. While some organizations are making strides with robust metrics, there is room for growth, particularly in standardizing the review process and ensuring that KPIs lead to actionable insights and improvements.

3.2.5. Cross-Industry insights: Learning from diverse sectors

In the fifth section of the survey, respondents reflected on sectors and industries outside of hydrogen that could provide valuable lessons for Diversity, Equity, and Inclusion (DE&I). The mixed responses indicate a range of perspectives on the transferability of DE&I practices across industries. Many respondents agree that the hydrogen sector can learn from various industries that have made notable strides in DE&I. The recognition of universal DE&I challenge and the adaptability of successful strategies are emphasized. Here's a synthesis of the respondents' views:

1. Specific Industries Mentioned:

- The **Technology Industry** is acknowledged for its initiatives to improve inclusion, despite facing significant diversity challenges.
 - The **Finance and Banking** sector is recognized for its efforts to diversify leadership roles and create inclusive cultures.
 - The **Healthcare** industry's approach to addressing patient care disparities and diversifying professionals is highlighted.
 - The **Aerospace and Aviation** sectors are noted for encouraging diversity in STEM fields through educational partnerships and outreach.
 - The **Renewable Energy** industry is mentioned for its targeted recruitment efforts and programs supporting career advancement.
 - The **Automotive Industry** is recognized for promoting diversity in leadership and implementing inclusive policies.
 - **Consulting and Professional Services** emphasize the value of diverse perspectives in problem-solving.
 - The **Entertainment and Media** industry is cited for promoting on- and off-screen diversity.
2. **Health Sector as an Example:** One respondent points to the *health sector*, where women are well-represented, including in leadership roles, as a potential model for the hydrogen sector.
 3. **Other Industries for Consideration:** Additional industries mentioned include *chemical, computer engineering, aeronautics, gas distribution, and education*, with each having distinct DE&I dynamics that could offer lessons.
 4. **“Sector-Agnostic” View:** Some respondents believe that DE&I is more company-specific rather than sector-specific, suggesting that organizational policies can be more influential than industry-wide practices.

From these responses, it is evident that while there is recognition of the value in learning from the DE&I efforts of other industries, there is also an acknowledgment of the need for careful adaptation to the specific challenges of the hydrogen sector. This feedback provides a valuable perspective that can guide

the H2Excellence project in seeking out and adapting best practices from a variety of sources to enhance DE&I within the hydrogen sector. However, it should be noted that while borrowing DE&I strategies from other sectors can be beneficial, it is crucial for the hydrogen sector to tailor these strategies to its unique context.

3.3. Key points and recommendations

The findings of this Chapter provide insightful perspectives on the current state of Diversity, Equity, and Inclusion (DE&I) within the hydrogen sector. These findings serve as a crucial foundation for shaping actionable strategies and implementing changes. The key points highlight existing challenges and the need for targeted initiatives to foster a more inclusive and equitable environment. In response, a set of recommendations is proposed to guide the project's implementation, ensuring it aligns with EU shared values and effectively addresses the identified challenges.

a. Summary of Key Points

1. **Underrepresentation of Women:** There is a noticeable underrepresentation of women in the hydrogen sector, particularly in technical roles and leadership positions. This trend mirrors broader disparities observed in the energy sector and STEM fields.
2. **Barriers in STEM Education:** A significant contributor to gender disparity in the hydrogen sector is the underrepresentation of women in STEM education, impacting the pool of female talent available for this industry.
3. **Cultural and Societal Barriers:** The survey findings indicate that cultural and societal barriers play a significant role in perpetuating gender inequality in the hydrogen sector.
4. **Existing DE&I Mechanisms:** Various organizations within the consortium have implemented DE&I mechanisms such as flexible work policies, inclusive recruitment, and gender sensitivity training. However, these are not universally adopted or fully effective in addressing the challenges.
5. **Monitoring and Evaluation Gaps:** While some organizations track DE&I through KPIs, there is a need for more consistent and comprehensive monitoring and evaluation mechanisms across the sector.
6. **Cross-Industry Learning:** Insights from other industries suggest that adaptable and successful DE&I strategies could be beneficial for the hydrogen sector.

b. Recommendations for Project Implementation

1. **Enhanced DE&I Training and Awareness:** Implement comprehensive DE&I training programs across all levels of the project to build awareness and understanding of the importance of diversity and inclusion.

2. **Targeted Recruitment Strategies:** Develop and implement recruitment strategies focused on increasing the representation of women and underrepresented groups in the hydrogen sector, particularly in technical and leadership roles.
3. **Support for Women in STEM:** Collaborate with educational institutions to support and encourage women's participation in STEM fields, providing scholarships, internships, and mentorship programs specific to the hydrogen sector.
4. **Flexible Work Arrangements:** Introduce and promote flexible work arrangements to accommodate diverse needs and promote work-life balance, especially for women and caregivers.
5. **Equal Pay and Opportunity Policies:** Establish and enforce policies ensuring equal pay for equal work and equitable opportunities for advancement and training within the project.
6. **Regular Monitoring and Evaluation:** Set up robust monitoring and evaluation mechanisms to track the progress of DE&I initiatives, using KPIs like diversity in team composition, pay equity, and employee satisfaction.
7. **Inclusive Project Design:** Ensure that project activities and benefits are accessible to and inclusive of all groups, including vulnerable and underrepresented populations.
8. **Community Engagement and Outreach:** Engage with local communities to understand their needs and perspectives, ensuring that the project's benefits reach a diverse audience.
9. **Adoption of Best Practices from Other Industries:** Actively seek and integrate DE&I best practices from other industries that have shown success in fostering an inclusive environment.
10. **DE&I Champions and Committees:** Establish DE&I champions or committees within the project to advocate for and oversee the implementation of inclusion strategies.

By implementing these recommendations, the H2Excellence project can effectively promote gender equality, enhance diversity, and ensure non-discrimination and social inclusion, aligning with EU shared values and contributing to a more equitable and successful hydrogen sector.

4. The “H2Excellence Inclusion Package”: *Guidelines for project implementation*

4.1 A mechanism for encouraging participation of women and other underrepresented groups

In the rapidly evolving Green Hydrogen sector, diversity in perspectives and expertise is not just an ideal; it's a necessity for innovation and progress. Recognizing this, the H2Excellence project is committed to breaking down barriers that hinder the participation of women and other underrepresented groups.

To effectively enhance participation, the project will implement a multifaceted mechanism, based on the *Implementation guidelines of the Erasmus+ and European Solidarity Corps Inclusion and Diversity Strategy*⁴⁵, comprising outreach, support, and inclusive actions that specifically aim on:

- **Outreach and Awareness:** Activities like *targeted campaigns, community engagement, and partnerships with educational institutions* will be leveraged to inspire and attract underrepresented groups to the hydrogen sector. Special emphasis will be placed on showcasing role models and success stories within these communities.
- **Support and Mentorship:** *Proposed mentorship programs, complemented by workshops and networking events*, will be established to provide ongoing support. This will include *resources for career development, leadership training, and peer-to-peer networking*, aiming to build confidence and a sense of belonging among these groups.
- **Inclusive Policies and Practices:** The project will rigorously review and adapt its internal policies to ensure they foster an inclusive culture. This includes *flexible arrangements, anti-discrimination policies, and transparent recruitment processes that prioritize diversity*.

The proposed actions/initiatives are grouped in 15 comprehensive Action Plans. Specific guidelines as well as examples and best practices are provided in order to guide the reader in the implementation of each Plan. The Action Plans outlined aim to gender mainstream the H2Excellence Tasks and promote DE&I within the project activities.

Special focus on Organizations

Taken into consideration the Equality in Energy Transitions Initiative's (C3E International) recommendations for closing the gender gap in the energy sector⁴⁶ as well as the survey findings, this report goes beyond project activities and aims support Organizations in the Hydrogen value chain to develop their own Inclusion Plans. Action plans like “improving accessibility in workplaces”, “promoting an inclusive workplace culture”, “diverse recruitment strategies” and “developing a supplier diversity

⁴⁵ European Union (2021) Implementation guidelines: Erasmus+ and European Solidarity Corps Inclusion and Diversity Strategy, Directorate-General for Education, Youth, Sport and Culture European Commission. <https://erasmus-plus.ec.europa.eu/document/implementation-guidelines-erasmus-and-european-solidarity-corps-inclusion-and-diversity-strategy>

⁴⁶ C3E International, IEA (2019) Status Report on Gender Equality in the Energy Sector 13-14 <https://www.equality-energytransitions.org/workstreams/knowledge-data-policies/>

policy” are some examples focusing on specific needs and gaps of the Industry. In this way the “H2Excellence Inclusion Package” serves as a valuable toolkit for introducing DE&I practices in the Hydrogen organizations, especially the SMEs that are the main receivers of training and exchange activities and workshops, who have also shown considerable gaps on DE&I at the survey findings. In this way this report goes one step forward the project activities and scope, aiming at the sustainability of the project results beyond the end of the project lifecycle.

4.2 Selection criteria for project activities

The H2Excellence project, dedicated to fostering a diverse and inclusive environment in the hydrogen sector, has established specific selection criteria for participation in project activities. These criteria are informed by the definitions and frameworks of the ERASMUS+ inclusion and diversity strategy, ensuring alignment with broader European Union initiatives aimed at enhancing accessibility and inclusivity.

❖ ERASMUS+ Inclusion and Diversity Strategy framework

According to the ERASMUS+ programme Inclusion and Diversity Strategy, “(young) people with fewer opportunities” are defined as those facing economic, social, cultural, geographical, or health-related obstacles, or challenges due to migrant backgrounds, disabilities, educational difficulties, or other factors leading to discrimination under Article 21 of the Charter of Fundamental Rights of the European Union. These factors create barriers that can limit their effective access to opportunities.

The ERASMUS+ strategy identifies several barriers affecting accessibility and outreach, which we have adopted as selection criteria for the H2Excellence project:

- **Disabilities:** Physical, mental, intellectual, or sensory impairments.
- **Health Problems:** Severe illnesses, chronic diseases, or other health-related situations.
- **Educational and Training System Barriers:** Difficulties within educational systems, early education leavers, NEETs (not in education, employment, or training), and low-skilled adults.
- **Cultural Differences:** Challenges faced by migrants, refugees, ethnic minorities, sign language users, and those with linguistic and cultural adaptation difficulties.
- **Social Barriers:** Social adjustment difficulties, anti-social behaviors, social marginalization, family circumstances, or living in institutional care.
- **Economic Barriers:** Low standard of living, low income, unemployment, poverty, homelessness, or financial instability.
- **Discrimination Barriers:** Discrimination based on gender, age, ethnicity, religion, sexual orientation, disability, or intersectional factors.
- **Geographical Barriers:** Residing in remote, rural, peripheral, or less developed areas, urban suburbs, or areas with limited services.

❖ Specified Target Groups

Based on the analysis in Chapter 3 and literature review, the project will also focus on the following underrepresented groups in STEM education:

- **Women**
- **People with Disabilities**
- **Migrants and Ethnic Minorities**
- **People from Low-Income Backgrounds**
- **Rural Youth**
- **LGBTQ+ Youth**
- **Young People with Lower Socioeconomic Backgrounds or/and Academic Attainment**
- **Young People from Disadvantaged Neighborhoods**
- **Young People from Roma Communities**
- **Young People from Other Ethnic and Linguistic Minority Groups**

In the inclusion plans, these groups are referred to as "*underrepresented groups*" or "*diverse groups*," and sometimes as "*marginalized groups*." This terminology underscores the project's commitment to including those who have historically faced systemic barriers to full participation in societal, economic, and educational opportunities.

❖ Local Community Engagement

Additionally, a focus will be placed on engaging **youth who live in proximity to the Centers of Vocational Excellence (CoVEs)**, including those associated with Vocational Education and Training (VET) institutes, Higher Education Institutions (HEIs), and Hydrogen Valleys/Organizations. This localized approach ensures community involvement and accessibility for those who might benefit most directly from the project's resources and opportunities.

❖ Implementation of Inclusivity and Accessibility Criteria

The selection criteria for project activities are therefore designed to prioritize inclusivity and accessibility.

- **Inclusivity Impact Assessment:** Each proposed activity will be evaluated for its potential to enhance diversity and inclusion within the project. This assessment will consider how the activity contributes to a more diverse and equitable hydrogen sector.
- **Accessibility Considerations:** Ensuring that activities are accessible to a diverse range of participants, including those with disabilities, different cultural backgrounds, or varied educational levels, is paramount. This includes logistical considerations like location, language, and format of activities.
- **Representation and Relevance:** Activities should represent diverse perspectives and address issues pertinent to various groups. This ensures that the project's output is relevant and beneficial to a broad audience.

These criteria underscore the H2Excellence project's commitment to creating an inclusive and diverse environment. By adopting these comprehensive selection criteria, the project not only advances the hydrogen sector but also upholds the values of equality and inclusivity championed by the European Union. Through this approach, H2Excellence sets a precedent for integrating diversity, equity, and inclusion into CoVE practices, contributing significantly to a more inclusive and equitable society.

4.3 Monitoring and evaluation

To ensure that the DE&I initiatives within the H2Excellence project are not only well-intentioned but also effective, a robust monitoring and evaluation framework is integral.





- **Regular Assessments and Reporting:** Periodic assessments will be conducted to monitor the implementation and impact of DE&I initiatives. These assessments will include data collection on participation rates, diversity metrics, and qualitative feedback from participants.
- **Feedback Mechanisms:** Channels for continuous feedback will be established, allowing stakeholders to voice their experiences and suggestions. This could include surveys and open forums.
- **Performance Metrics and Continuous Improvement:** Specific metrics are included for each Action Plan to measure the effectiveness of DE&I initiatives, such as diversity in leadership roles, attendee demographics at events, and satisfaction levels among underrepresented groups. These insights will be used for continuous improvement in the project's DE&I efforts.


4.4 Guidelines for project implementation: 15 Action Plans

No.	Action Plan	VET Providers	HEIs	Industry
1	Ensure Equity in Student Recruitment at Project Activities	x	x	
2	Promote Inclusive Dissemination and Communication Strategies	x	x	x
3	Promote Gender-Inclusive Language	x	x	x
4	Ensure Accessibility in the Online Programmes	x	x	
5	Promote Gender Equity in Funding and Support	x	x	
6	Ensure Inclusive Internship Opportunities	x	x	x
7	Establish Mentorship for Students from underrepresented groups	x	x	x
8	Ensure STEM Pathways for Women	x	x	
9	Organize Peer Networking Events	x	x	
10	Foster Visibility and Recognition Initiatives	x	x	x
11	Improve Accessibility in Workplaces			x
12	Promote an Inclusive Workplace Culture			x
13	Develop and Establish Diverse Recruitment Strategies			x
14	Establish a Supplier Diversity Policy			x
15	Establish Collaborative Networks with Women Organizations that support and advocate for women in the Hydrogen Sector	x	x	x

1 ENSURE EQUITY IN STUDENT RECRUITMENT AT PROJECT ACTIVITIES



Action Plan 1	1. Ensure Equity in Student Recruitment at Project Activities (VET Providers, HEIs)
 Description	Develop inclusive and equitable student recruitment strategies focusing on underrepresented groups to foster a diverse and vibrant student community in Vocational Education and Training (EQF 3-5) and Higher Education (EQF 6-8) programs related to green hydrogen technology.
 Objective	<i>To attract and enroll a diverse student body, including women, minorities, and economically disadvantaged individuals, VET and Higher Education programs related to the hydrogen sector.</i>
 Target Audience	<ul style="list-style-type: none"> • Vocational Education and Training (VET) providers • Higher Education institutions (HEIs) • Organizations and institutions working with underrepresented groups • Students and their families
 Proposed Activities/Steps	<ol style="list-style-type: none"> 1. Outreach and Engagement: <ul style="list-style-type: none"> ➤ Conduct targeted outreach campaigns in communities with underrepresented groups to raise awareness about hydrogen technology and the opportunities it presents. ➤ Engage with community organizations, faith-based institutions, and youth groups to connect with potential students and their families. ➤ Organize workshops, seminars, and events to showcase the benefits of studying green hydrogen technology and to provide hands-on experience with hydrogen technologies. 2. Establish partnerships with secondary schools to introduce students to hydrogen technology and career pathways in the field. <ul style="list-style-type: none"> ➤ Develop and deliver STEM-focused lessons, projects, and competitions related to hydrogen technology. ➤ Invite secondary school teachers to participate in training and workshops on hydrogen technology. ➤ Organize open days when schools can visit the CoVE laboratories and learn more about fuel cells and green hydrogen technology. 3. Develop promotional materials that reflect diversity and inclusivity. (see Plan No2) 4. Offer scholarships and financial aid tailored for underrepresented groups. (see Plan No 5)

	<p>5. Ensure inclusive Internship opportunities for underrepresented groups. (see plan 6)</p>
 <p>Application to H2Excellence Project</p>	<ul style="list-style-type: none"> • Related to WP3 Teaching Training and Learning Activities: Design and implementation of a transnational training and development program in fuel cell and hydrogen technologies for various EQF levels and lifelong learning qualifications: Task 3.2. Design and deployment of EQF level 3-5 training programme Task 3.4. Design and deployment of lifelong and professional training programme Task 3.5. Developing quality standards and validation of developed training courses and modules These strategies will enhance the diversity of students, contributing to a more inclusive hydrogen sector workforce in the future. • WP 4: Task 4.3. Open innovation, competitions and flagship projects design and deployment with universities, R&D, and industry. • WP6: Task 6.2. Dissemination, communication, public awareness, and vocational training promotion.








Examples - Best Practices

1. Gateway to Industry Schools Project for Hydrogen (GISPH2) – Queensland, Australia

The Gateway to Industry Schools Project for Hydrogen (GISPH2) is an innovative program designed to foster sustainable partnerships between industry, government, and the education sector in Queensland, Australia. Its primary goal is to advance the development of Queensland's Hydrogen workforce, attracting new workers and guiding future training initiatives. GISPH2 places a strong emphasis on broadening knowledge in science, technology, engineering, and mathematics (STEM), thereby diversifying and accelerating the development of skills and opportunities in the hydrogen industry. The project is at the forefront of renewable hydrogen production in Australia and is set to make significant contributions by 2030.

GISPH2 offers a range of resources to assist teachers and schools in connecting with the Hydrogen Industry. This includes a 'live' resource site that evolves as the industry grows and focuses on renewable innovations. The program also provides forms and feedback mechanisms for student and teacher engagement, and is an initiative of the Queensland Government, hosted by ESQ (Energy Skills Queensland). This program represents a proactive approach to developing the necessary skills and training required for the evolving hydrogen industry, ensuring that students, teachers, and schools are well-equipped and informed about the opportunities in this emerging sector. [READ MORE](#)



Timeline		
 Short-term	 Mid-term	 Long-term
Develop and finalize inclusive recruitment strategies, promotional materials, and partnerships with secondary schools. (1-3 months)	Implement targeted outreach campaigns, workshops, and events. (3-6 months)	Evaluate the effectiveness of recruitment strategies and make adjustments as needed. (12+ months)
 Success Metrics	<p><i>The effectiveness of the plan will be evaluated based on the following criteria:</i></p> <ul style="list-style-type: none"> • Measure the increase in applications and enrollments from underrepresented group: Track the number of applications and enrollments from underrepresented groups in VET and higher education programs related to green hydrogen and fuel cells technology. Achieve a year-on-year increase of ≥15% in applications and enrollments from underrepresented groups. • Student satisfaction: Survey students from underrepresented groups to assess their satisfaction with the recruitment and retention strategies. Attain an average satisfaction rate of ≥80% as reported in student surveys. • Community awareness: Increased awareness of green hydrogen technology among underrepresented communities. Achieve a ≥25% increase in community engagement activities and a corresponding rise in awareness levels as measured through surveys or community feedback mechanisms. 	
 Resources	<ul style="list-style-type: none"> • Dedicated budget for student recruitment initiatives. • Expertise in marketing, outreach, and education. • Collaboration with community organizations and secondary schools. 	
 Challenges		 Mitigating Strategies
<ul style="list-style-type: none"> • Addressing unconscious bias in recruitment practices. • Overcoming financial barriers for underrepresented groups. • Breaking down stereotypes and misconceptions about hydrogen technology. 		<ul style="list-style-type: none"> • Provide unconscious bias training for recruitment staff. • Develop scholarships and financial aid programs for underrepresented groups. • Collaborate with community organizations to dispel myths and promote the benefits of green hydrogen technology.







1

**ENSURE EQUITY IN STUDENT
RECRUITMENT AT PROJECT
ACTIVITIES**



2 INCLUSIVE DISSEMINATION & COMMUNICATION STRATEGIES (ALL)



Action Plan 2	2. Inclusive Dissemination & Communication Strategies (All)
 Description	This action plan aims to develop dissemination and communication strategies that reflect and respect the diversity of audiences, ensuring inclusivity and accessibility in all outreach and promotional materials related to the H2Excellence Project.
 Objective	To create dissemination and communication materials that are representative of all groups, ensuring that messages are inclusive, accessible, and resonate with a diverse audience.
 Target Audience	<ul style="list-style-type: none"> • Internal stakeholders: <i>Project partners, research institutions, and industry participants.</i> • External stakeholders: <i>Students and their families, researchers and educators, policymakers, media, the general public and local communities.</i>
 Proposed Activities/Steps	<ol style="list-style-type: none"> 1. Diversity Audit of Existing Materials: <ul style="list-style-type: none"> ➤ Review current marketing and communication materials to assess their inclusivity and diversity representation. ➤ Identify areas for improvement in terms of language, imagery, and accessibility features. ➤ Document findings and recommendations for revisions. 2. Inclusive Content Creation Guidelines: <ul style="list-style-type: none"> ➤ Collaborate with diverse experts and stakeholders to develop guidelines for creating inclusive and accessible marketing materials. ➤ Address considerations for language, imagery, and accessibility features, such as subtitles, alternative text, and multilingual support. ➤ Ensure guidelines are aligned with the ERASMUS+ Guidelines as well as best practices in inclusive marketing and accessibility. 3. Training for Marketing Teams: <ul style="list-style-type: none"> ➤ Conduct training sessions for the marketing and communication teams on inclusive marketing practices. ➤ Cover topics such as unconscious bias, cultural sensitivity, and the creation of inclusive and accessible content. ➤ Provide hands-on exercises and case studies to reinforce learning. 4. Collaboration with Diverse Groups: <ul style="list-style-type: none"> ➤ Engage with diverse groups to gain insights and feedback on marketing materials. ➤ Conduct focus groups, surveys, and workshops to gather diverse perspectives. ➤ Incorporate feedback into the development and revision of materials. 5. Regular Review and Update of Materials: <ul style="list-style-type: none"> ➤ Establish a process for regular review and update of marketing materials. ➤ Schedule regular audits to assess inclusivity and accessibility. ➤ Incorporate new feedback and best practices into revised materials.



- WP6 Task 6.2. *Dissemination, communication, public awareness, and vocational training promotion.* ensure effective dissemination and engagement with a diverse range of target groups and stakeholders
- Overall Project: Inclusive marketing and communication strategies will enhance the reach and impact of the H2Excellence Project, ensuring that information is accessible and appealing to a wide and diverse audience.

Examples - Best Practices

Embrace a Future Powered by Innovation: Join Our Cutting-Edge Hydrogen Technology Program

Are you passionate about shaping the future of energy? Seek a career in a dynamic and rapidly growing field? Then join our transformative hydrogen technology program and embark on a journey of discovery and innovation.

In this comprehensive program, you'll delve into the science and engineering behind hydrogen technology, gaining hands-on experience in cutting-edge research and development. You'll learn from industry experts and collaborate with fellow students to tackle real-world challenges, developing the skills and knowledge to become a driving force in the hydrogen revolution.

Why Choose Our Program?

We are committed to fostering a diverse and vibrant student community. We believe that a diverse range of perspectives and experiences enriches our learning environment and strengthens our ability to innovate. If you are a woman or a member of an underrepresented group, we encourage you to engage in our programs. Feel free to discuss any challenges you may encounter with our career mentors, who are dedicated to supporting your success.

We are committed to fostering a diverse and vibrant student community. We believe that a diverse range of perspectives and experiences enriches our learning environment and strengthens our ability to innovate. If you are a woman or a member of an underrepresented group, we encourage you to engage in our programs. Feel free to discuss any challenges you may encounter with our career mentors, who are dedicated to supporting your success.

Join us and make a real difference in shaping the future of energy. Apply now and embark on a journey of innovation and transformation.

1. Inclusion statement

Include an inclusive statement on future training course descriptions that addresses the program's commitment to diversity and inclusion. This statement should clearly articulate the program's values and demonstrate its efforts to create a welcoming and supportive environment for all students, regardless of their background or identity. Here are some specific suggestions for writing an effective inclusive statement:

- **State your commitment to diversity and inclusion in the first sentence.** This sets the tone for the rest of the statement and demonstrates your organization's dedication to creating an inclusive environment.
- **Emphasize the value of diversity.** Explain how a diverse student body enriches the learning experience and fosters innovation.
- **Highlight specific initiatives that you have implemented to promote diversity and inclusion.** This could include scholarships for underrepresented groups, mentorship programs, or partnerships with community organizations.
- **Call to action.** Encourage students from underrepresented groups to apply and explain the support that you will provide to help them succeed.

2. Communication guidelines for ERASMUS+ projects

“Your Project #CommsJourney” is a step-by-step guide for the beneficiaries of the Erasmus+, Creative Europe and European Solidarity Corps programmes to support them in their communication activities. The publication provides also guidance for developing inclusive communication material. [READ MORE](#)



Timeline		
 Short-term	 Mid-term	 Long-term
Conduct diversity audit, develop guidelines, and provide initial training. (1-3 months)	Engage with diverse groups and begin implementing feedback. (3-6 months)	Implement regular review and update process. (12+ months)
 Success Metrics	<p><i>The effectiveness of the plan will be evaluated based on the following criteria:</i></p> <ul style="list-style-type: none"> Increased diversity and representation in marketing materials: Ensure that ≥80% of all marketing materials visibly incorporate elements of diversity and inclusion. Positive feedback from diverse audiences on the inclusivity and accessibility of materials: Achieve a Net Promoter Score of ≥60 from diverse audience segments, indicating a high level of satisfaction and likelihood to recommend the materials. Increased engagement with marketing materials from diverse audiences: Attain a ≥30% increase in unique visitors from diverse demographics engaging with the marketing materials annually. Improved brand reputation and perception among diverse audiences: Achieve a positive sentiment score of ≥70% in feedback and social media analyses, reflecting a strong brand reputation and perception among diverse audiences.. 	
 Resources	<ul style="list-style-type: none"> Dedicated budget for content creation and dissemination. Expertise in marketing, communication, and accessibility. Collaboration with diverse groups and organizations. 	
 Challenges		 Mitigating Strategies
<ul style="list-style-type: none"> Identifying and addressing unconscious bias in marketing practices. Overcoming cultural sensitivities and language barriers. Ensuring accessibility for diverse audiences with disabilities. 		<ul style="list-style-type: none"> Employ diverse teams in the development and review of marketing materials. Utilize culturally sensitive language and imagery. Provide multilingual support and alternative text for accessibility. Conduct regular training and sensitization sessions for marketing teams. Collaborate with experts in diversity, inclusion, and accessibility.







2 INCLUSIVE DISSEMINATION & COMMUNICATION STRATEGIES (ALL)



3 PROMOTE GENDER-INCLUSIVE LANGUAGE (ALL)

WORLD IS MORE COLORFUL



Action Plan 3	3. Promote Gender-Inclusive Language (All)
 Description	<p>This action plan aims to implement strategies and guidelines to ensure the use of gender-inclusive language in all project communications, documentation, and interactions.</p>
 Objective	<ul style="list-style-type: none"> ✓ <i>Develop clear and comprehensive guidelines for using gender-inclusive language in project communications.</i> ✓ <i>Provide training to project staff on gender-inclusive language and how to apply these guidelines effectively.</i> ✓ <i>Encourage and support the use of gender-inclusive language in all project communications, documentation, and interactions.</i>
 Target Audience	<p>All project staff, including project managers, engineers, researchers, and communication professionals.</p>
 Proposed Activities/Steps	<ol style="list-style-type: none"> 1. Develop Guiding Principles: <ul style="list-style-type: none"> ➤ Establish a committee or task force comprising diverse members to formulate guiding principles for gender-inclusive language in project communications. ➤ Review relevant guidelines and best practices for gender-inclusive language, considering international standards and local context. ➤ Compile a comprehensive document outlining the principles for gender-inclusive language, encompassing language, imagery, and other forms of communication. 2. Training and Awareness: <ul style="list-style-type: none"> ➤ Conduct mandatory training sessions for all project staff on gender-inclusive language. ➤ Engage external experts or consultants specializing in gender equality and communication to deliver the training. ➤ Cover topics such as the importance of gender-inclusive language, common pitfalls to avoid, and practical strategies for applying gender-inclusive language in various communication contexts. 3. Enforcement and Monitoring: <ul style="list-style-type: none"> ➤ Establish a process for reviewing and monitoring the use of gender-inclusive language in project communications. ➤ Assign a designated resource or team to oversee the enforcement of gender-inclusive language guidelines. ➤ Regularly review project communications for adherence to gender-inclusive language guidelines. ➤ Offer constructive feedback and guidance to staff who require assistance in applying gender-inclusive language effectively.



Application to
H2Excellence
Project

4. Promoting Inclusive Language Use:

- Encourage the use of gender-neutral pronouns and inclusive language across all project communications.
- Promote the use of gender-inclusive imagery and visuals in project documentation and marketing materials.
- Celebrate and recognize staff who consistently use gender-inclusive language in their communications.

- Overall Project: Incorporating gender-inclusive language will align the project with EU values of non-discrimination and gender equality, ensuring that all genders feel represented and respected.
- WP3 Tasks:
 - Task 3.2. Design and deployment of EQF level 3-5 training programme
 - Task 3.3. Design and deployment of EQF level 6-8 training programme
 - Task 3.4. Design and deployment of lifelong and professional training programme
 - Task 3.5. Developing quality standards and validation of developed training courses and modules
 - 3.6. Teacher upskilling training programme and certification process
- WP6 Task 6.2. Dissemination, communication, public awareness, and vocational training promotion.

Examples - Best Practices

Guidelines for Using Gender-Inclusive Language

Language plays a crucial role in shaping our perceptions and understanding of the world, and it can either reinforce or challenge gender stereotypes and inequalities. By adopting gender-inclusive language, we can create a more respectful and inclusive environment for all genders. This guide provides comprehensive guidelines for implementing gender-inclusive language across various project materials, including communications, training materials, online programs, lectures, and reports.

1. Avoid Gender-Specific Titles

Use gender-neutral titles like “Chairperson” instead of “Chairman” or “Salesperson” instead of “Salesman.”

When addressing groups, use “everyone,” “folks,” or “all” instead of gendered greetings like “ladies and gentlemen.”

2. Use Gender-Neutral Pronouns

When the gender of a person is unknown or irrelevant, use “they/them/theirs” instead of “he/she” or “his/hers.”

For forms and surveys, include options for gender-neutral pronouns and an option for respondents to write their preferred pronouns.

Use online writing tools to track gender biases

Grammarly: This writing tool offers suggestions for gender-neutral language.

Hemingway Editor: Useful for making your writing clear and inclusive.

3. Rephrase Sentences to Remove Gender

Instead of “Each student should submit his report,” use “Students should submit their reports.”

Use plural forms to naturally incorporate gender-neutral language.

4. Include Diverse Examples and Scenarios

In training materials and examples, consciously include diverse names and scenarios that reflect various genders and cultures.

Avoid stereotypes in examples, ensuring they do not reinforce gender roles.

5. Review and Revise Existing Materials

Actively review and revise all existing materials to ensure compliance with gender-inclusive standards.

This includes training modules, presentation slides, marketing materials, and official documentation.

6. Educate and Train Staff

Conduct regular training sessions on gender inclusivity in language.

Include resources and guidelines in employee handbooks.

7. Gender-Inclusive Policy Statements

Include a statement in all official documents and websites highlighting your commitment to gender inclusivity.

This can also be part of your organization's diversity and inclusion policy.

Additional Resources

1. ERASMUS+ Communication guidelines for project beneficiaries

A step-by-step guide for the beneficiaries of the Erasmus+, Creative Europe and European Solidarity Corps programmes to support them in their communication activities. The guide provides also tips for inclusive language writing. [Read More](#)



2. GenderTerm: UN Women online resources on the use of gender-inclusive language

UN Women provides an extensive, searchable lexicon with over 650 terms in multiple languages including Arabic, English, French, Russian, and Spanish. This resource, along with other materials on gender-inclusive language, is continuously updated and accessible online. [READ MORE](#)



3. GLAAD Media Reference Guide – 11th Edition

GLAAD's 11th edition Media Reference Guide provides journalists and media creators with education and guidance for accurately and fairly representing LGBTQ stories. It's not a comprehensive glossary or a prescriptive guide for the LGBTQ community, emphasizing the diversity within the community and the importance of asking individuals about their self-identification and pronouns. The guide covers a wide range of topics, including transgender terms, various LGBTQ-focused issues, and resources for further information. GLAAD aims to shape narratives and provoke dialogues for cultural change, underlining its commitment to LGBTQ acceptance and accurate media representation. [READ MORE](#)

Tips

Use inclusive language in all languages:

When translating project materials into other languages, ensure that the translated text uses inclusive language that is appropriate for the target language and culture.

Stay Updated:

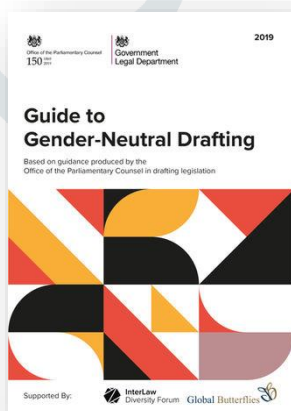
Language evolves constantly. Stay informed about changes and adapt your language usage accordingly.

Seek Feedback:

Encourage feedback from team members and stakeholders on the inclusivity of language used.

Lead by Example:

Leadership should model the use of gender-inclusive language in their communication.



4. UK Government Guide to Gender-Neutral Drafting

The Office of the Parliamentary Counsel and the Government Legal Department in the UK have created a Guide to Gender-Neutral Drafting, intended to encourage the wider UK legal profession to adopt gender-neutral language in legal documents, marking a significant step towards standardizing this practice in UK legal drafting. [READ MORE](#)





Timeline		
 Short-term	 Mid-term	 Long-term
Develop guiding principles and conduct initial training. (1-3 months)	Implement ongoing monitoring and enforce gender-inclusive language guidelines.(3-6 months)	Integrate gender-inclusive language into all aspects of project communications.(12+ months)
 Success Metrics	<p><i>The effectiveness of the plan will be evaluated based on the following criteria:</i></p> <ul style="list-style-type: none"> Increased use of gender-inclusive language in project communications: Achieve a compliance rate of $\geq 95\%$ in using gender-inclusive language across all project communications. Positive feedback from diverse stakeholders on the use of gender-inclusive language: Attain a positive sentiment score of $\geq 85\%$ in stakeholder feedback specifically regarding the use of gender-inclusive language. Improved gender equality and inclusivity within the project's communication practices: Demonstrate a $\geq 50\%$ reduction in instances of gender bias and stereotyping in project communications, as assessed through periodic content audits and stakeholder feedback. 	
 Resources	<ul style="list-style-type: none"> Dedicated budget for training and resources on gender-inclusive language. Expertise in gender equality and communication. Collaborative partnerships with external organizations or experts. 	
 Challenges	 Mitigating Strategies	
<ul style="list-style-type: none"> Identifying and addressing unconscious bias in language use. Overcoming ingrained habits and traditions in language usage. Ensuring inclusivity for all gender identities and expressions. 	<ul style="list-style-type: none"> Provide ongoing training and support to staff on gender-inclusive language. Encourage open dialogue and feedback on language use. Foster a culture of respect and inclusivity for all genders. 	




3 PROMOTE GENDER-INCLUSIVE LANGUAGE (ALL)



4 ENSURE ACCESSIBILITY IN ONLINE PROGRAMMES (VET PROVIDERS, HEIS)

Action Plan 4	<h2 style="text-align: center;">4. Ensure Accessibility in Online Programmes</h2> <p style="text-align: center;">(VET Providers, HEIs)</p>
 Description	<p>This plan aims to Enhance the accessibility of H2Excellence on-line and virtual (MOOC courses) educational and training programs, to ensure they are inclusive for all, including those with disabilities.</p>
 Objectives	<ul style="list-style-type: none"> ✓ <i>Implement accessibility guidelines for all H2Excellence online courses.</i> ✓ <i>Provide training and support to course developers and instructors on accessibility best practices.</i> ✓ <i>Ensure that H2Excellence online courses are compliant with relevant accessibility standards.</i> ✓ <i>Conduct regular audits of H2Excellence online courses to identify and address accessibility issues.</i> ✓ <i>Gather feedback from participants with disabilities to improve the accessibility of H2Excellence online courses.</i>
 Target Audience	<ul style="list-style-type: none"> • Course developers and instructors • Online learning platform providers • Participants in H2Excellence online courses
 Proposed Activities/Steps	<ol style="list-style-type: none"> 1. Develop Accessibility Guidelines: <ul style="list-style-type: none"> ➤ Collaborate with experts in accessibility and disability support to develop comprehensive accessibility guidelines for online courses. ➤ Ensure that the guidelines are aligned with relevant international standards, such as WCAG 2.1. ➤ Publish the accessibility guidelines among partners involved and make them easily accessible to course developers and instructors. 2. Provide Accessibility Training if needed: <ul style="list-style-type: none"> ➤ Conduct training sessions for all course developers and instructors on accessibility best practices. ➤ Cover topics such as web accessibility standards, alternative text for images, screen reader compatibility, and keyboard navigation. ➤ Provide hands-on exercises and case studies to reinforce learning. 3. Ensure Accessibility Compliance: <ul style="list-style-type: none"> ➤ Conduct a thorough review of all existing online courses to identify and address accessibility issues. ➤ Use online Web Accessibility Testing Tools such as Testsigma, accessible, Siteimprove, Google Lighthouse for automated accessibility testing. ➤ Implement appropriate accessibility solutions, such as providing captions for videos, transcripts for audio content, and alternative text for images. ➤ Regularly test H2Excellence online courses with screen readers and assistive technologies to ensure they are accessible to individuals with disabilities.

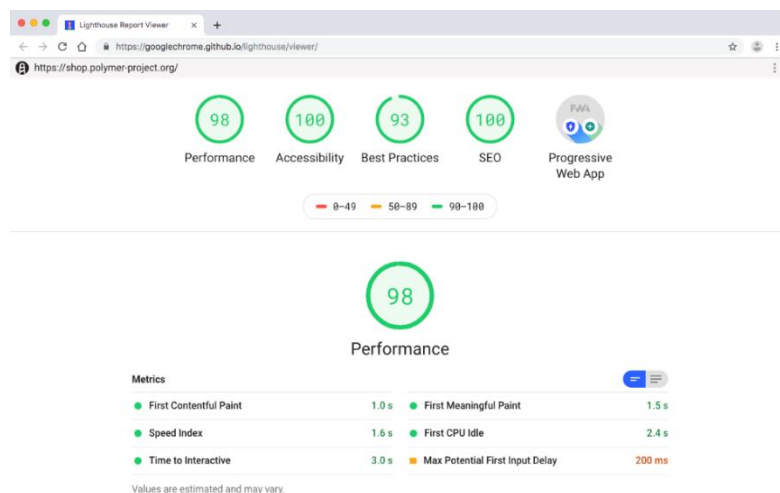
	<p>4. Gather Feedback and Continuous Improvement:</p> <ul style="list-style-type: none"> ➤ Establish a process for gathering feedback from participants with disabilities on the accessibility of H2Excellence online courses. ➤ Use feedback to identify areas for improvement and make ongoing adjustments to the courses. ➤ Regularly review and update accessibility guidelines to reflect best practices and technological advancements.
 <p>Application to H2Excellence Project</p>	<p>WP3 Teaching, training, and learning activities:</p> <ul style="list-style-type: none"> Task 3.2. Design and deployment of EQF level 3-5 training programme Task 3.3. Design and deployment of EQF level 6-8 training programme Task 3.4. Design and deployment of lifelong and professional training programme Task 3.5. Developing quality standards and validation of developed training courses and modules Task 3.8. Piloting, student feedback and assessment of courses and training improvements planning <p>Other WPs:</p> <ul style="list-style-type: none"> Task 4.5. Design and planning of a joint learning environment/lab for all education providers Task 5.6. Green hydrogen knowledge hub & online training platform Task 6.2. Dissemination, communication, public awareness, and vocational training promotion

Examples - Best Practices

1. Google Lighthouse tool



Google Lighthouse is a browser extension and web app that provides audits of websites to identify areas for improvement, including accessibility. It assesses websites against a set of criteria, including WCAG 2.1 guidelines. Lighthouse offers valuable insights into accessibility issues, such as missing alternative text for images, poor color contrast, and lack of keyboard navigation. It also provides actionable recommendations to address these issues. Download Browser Extension [HERE](#)



2. WCAG 2.1: Web Content Accessibility Guidelines

What is WCAG?

WCAG 2.1 is a set of guidelines for making web content more accessible to people with disabilities. It is a joint initiative of the World Wide Web Consortium (W3C), the Web Accessibility Initiative (WAI), and the accessibility community. WCAG 2.1 covers a wide range of disabilities, including visual, auditory, motor, cognitive, and learning impairments.

WCAG 2.1 is organized into four main principles:

1. **Perceivable:** Information and user interface components must be perceivable by users with disabilities. This includes providing alternative text for images, captions for audio content, and transcripts for video content.
2. **Operable:** User interfaces must be operable by users with disabilities. This includes providing keyboard navigation, ensuring that all functionality can be accessed through the keyboard, and providing alternative input mechanisms for users with limited fine motor control.
3. **Understandable:** Information and user interface components must be understandable by users with disabilities. This includes using clear and concise language, avoiding jargon and overly technical terms, and providing clear and consistent navigation.
4. **Robust:** Content must be robust enough that it can be interpreted correctly by a wide range of user agents, including assistive technologies. This includes using semantic markup, avoiding reliance on scripting and style sheets, and providing clear and consistent markup.

How to Use WCAG 2.1?

There are a number of resources available to help you use WCAG 2.1. These resources include:

- The WCAG 2.1 documentation: This is the official documentation for WCAG 2.1, and it provides detailed information on the guidelines and how to apply them.
- The WCAG 2.1 self-assessment checklist: This checklist can help you identify areas where your website or web application may not be compliant with WCAG 2.1.
- The WCAG 2.1 user agent testing tools: These tools can help you test your website or web application with assistive technologies.

By using these resources and working with experts, you can ensure that your website or web application is accessible to people with disabilities. This will make your website or web application more inclusive and equitable for all users.

[LEARN MORE](#)

Timeline		
 Short-term	 Mid-term	 Long-term
Develop accessibility guidelines and provide initial training. (1-3 months)	Conduct accessibility audits and implement solutions. (3-6 months)	Continuously monitor and improve accessibility of online courses. (12+ months)
 Success Metrics	<p><i>The effectiveness of the plan will be evaluated based on the following criteria:</i></p> <ul style="list-style-type: none"> • Number of H2Excellence online courses that meet or exceed accessibility standards: All website and relevant pages of the online courses scoring above 90 on Google Lighthouse accessibility report (or other reporting tool) • Positive feedback from participants with disabilities on the accessibility of H2Excellence online courses: Attain an average satisfaction rating of ≥85% from participants with disabilities regarding the accessibility of online courses. • Increase in enrollment and participation in H2Excellence online courses by individuals with disabilities: Achieve a year-on-year increase of ≥20% in enrollment of individuals with disabilities in H2Excellence online courses. 	
 Resources	<ul style="list-style-type: none"> • Dedicated budget for accessibility training and resources. • Expertise in accessibility and disability support. • Collaboration with organizations specializing in accessibility testing and auditing. 	
 Challenges		 Mitigating Strategies
<ul style="list-style-type: none"> • Inadequate knowledge and understanding of accessibility best practices among course developers and instructors. • Limited availability of accessible content and resources. • Technical challenges in ensuring compatibility with assistive technologies. 		<ul style="list-style-type: none"> • Provide comprehensive training and support to course developers and instructors on accessibility. • Develop and curate accessible content and resources. • Collaborate with organizations specializing in accessibility technology to ensure compatibility.







4 ENSURE ACCESSIBILITY IN ONLINE PROGRAMMES (VET PROVIDERS, HEIS)



5 PROMOTE GENDER EQUITY IN FUNDING AND SUPPORT (VET PROVIDERS, HEIS)



Action Plan 5	5. Promote Gender Equity in Funding and Support (VET Providers, HEIs)
 Description	<p>Ensure equitable distribution of funding, resources, and support for female students and researchers in HEIs and VET programs related to STEM studies and specifically to green hydrogen technology.</p>
 Objective	<ul style="list-style-type: none"> ✓ <i>Enhance the participation of female students and researchers in STEM fields, particularly in hydrogen technology.</i> ✓ <i>Increase the visibility and recognition of female achievements in the hydrogen sector.</i> ✓ <i>Encourage and support female students and researchers to pursue careers in STEM and hydrogen technology.</i>
 Target Audience	<ul style="list-style-type: none"> • Female students and researchers enrolled in STEM-related programs, particularly in hydrogen technology, at HEIs and VET providers. • VET providers and HEIs • Funding agencies, research institutions, and industry partners involved in supporting STEM education and research.
 Proposed Activities/Steps	<ol style="list-style-type: none"> 1. Targeted Scholarships and Grants: <ul style="list-style-type: none"> ➤ Offer scholarships and research grants specifically for female students and researchers in STEM programs related to hydrogen technology. ➤ Establish criteria for these scholarships and grants that consider factors such as academic merit, financial need, and research potential. ➤ Promote these scholarships and grants to attract female students and researchers to STEM fields, particularly in hydrogen technology. 2. Support Services: <ul style="list-style-type: none"> ➤ Establish support services like mentoring, career counseling, and professional development workshops specifically for female students and researchers in STEM programs related to hydrogen technology. ➤ Provide mentorship from established female scientists and engineers in hydrogen technology to guide and support female students and researchers. ➤ Organize workshops on career development, networking, and entrepreneurship to empower female students and researchers to pursue their career aspirations. 3. Visibility and Recognition: <ul style="list-style-type: none"> ➤ Highlight the achievements of female students and researchers in STEM fields, particularly in hydrogen technology, through various channels, such as social media, conferences, and publications. ➤ Organize events and seminars to showcase the work and contributions of female scientists and engineers in the hydrogen sector. ➤ Develop case studies and success stories of female role models in the hydrogen sector to inspire and motivate other female students and researchers.



Application to
H2Excellence
Project

- Overall Project: This Plan aims to increase the participation of female students and researchers in STEM fields, particularly in hydrogen technology, which aligns with the project's focus on diversity and equity in education and research.

Specific Tasks:

- Task 3.7. VET teachers, students and staff mobility and industrial placement
- Task 5.5. Students, staff, and teachers practical skills training and mobility support across CoVEs
- Task 6.1. Integration with national/regional economic and innovation ecosystems & site visits
- Task 6.4. Strategy and action plan for long-term ecosystem integration and support to the attraction of foreign investment project
- Task 6.6. Development of strategy, business model and sustainability plan for CoVEs post-project

Examples - Best Practices

1. ERA Fellowships – Green Hydrogen 2024

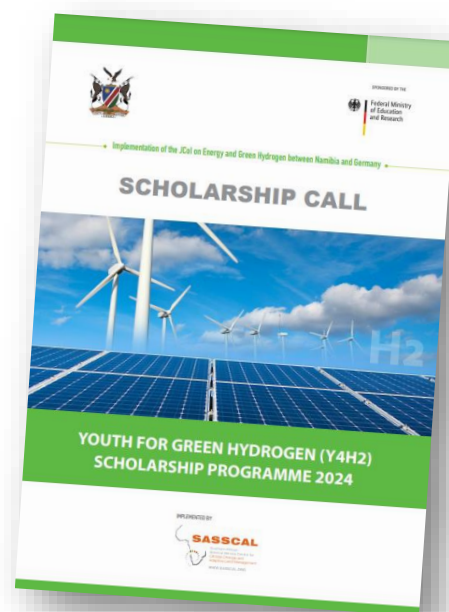


Deutscher Akademischer Austauschdienst
German Academic Exchange Service

The DAAD (German Academic Exchange Service) has established the "ERA Fellowships – Green Hydrogen" program. This program accompanies the Strategic Research and Innovation Agenda of the European Agenda Process on Green Hydrogen. Both German and international students can apply for these scholarships, which are available for studies in Germany or for semesters abroad, internships abroad, or final theses abroad for national students. [LEARN MORE](#)

2. Youth for Green Hydrogen (Y4H2) Scholarship Programme 2024 in Namibia

This program offers scholarships for Namibian youths, with a preference for *female applicants, previously disadvantaged individuals, persons with disabilities, and applicants from specific regions* in Namibia. The program requires applicants to have a minimum of a TVET certificate Level 2 or equivalent. [LEARN MORE](#)







Timeline		
Short-term	Mid-term	Long-term
Develop guidelines and criteria for targeted scholarships and grants, establish support services framework, and identify potential mentors and speakers. (1-3 months)	Launch targeted scholarships and grants, organize workshops and mentorship programs, and conduct media campaigns to promote visibility and recognition of female STEM professionals. (3-6 months)	Continuously evaluate and refine the program, seeking feedback from participants and stakeholders. (12+ months)
Success Metrics	<p><i>The effectiveness of the plan will be evaluated based on the following criteria:</i></p> <ul style="list-style-type: none"> • Increase in the number of female students and researchers enrolled in STEM programs related to hydrogen technology: Achieve a year-on-year increase of $\geq 15\%$ in the enrollment of female students in STEM programs specifically related to hydrogen technology. • Increase in the number of female recipients of scholarships and grants for STEM research in hydrogen technology: Attain a $\geq 20\%$ annual increase in the number of female recipients of scholarships and grants dedicated to STEM research in the hydrogen technology sector. • Increase in participation of female students and researchers in STEM conferences, workshops, and professional development events: Ensure a $\geq 25\%$ increase in the participation of female students and researchers in STEM conferences, workshops, and professional development events related to hydrogen technology. • Increase in the visibility and recognition of female scientists and engineers in the hydrogen sector through media coverage, publications, and awards: Achieve a minimum of 50 media mentions or publications per year that specifically highlight the achievements and contributions of female scientists and engineers in the hydrogen sector. 	
Resources	<ul style="list-style-type: none"> • Dedicated budget for scholarships, grants, and support services. • Collaboration with funding agencies, research institutions, and industry partners to secure additional funding and resources. • Expertise in gender equality, STEM education, and career development. 	
Challenges		Mitigating Strategies
<ul style="list-style-type: none"> • Addressing unconscious bias and stereotypes in STEM education and the workplace. • Overcoming cultural and societal barriers that hinder female participation in STEM fields. • Ensuring that support services are accessible, culturally sensitive, and tailored to the specific needs of female students and researchers. 		<ul style="list-style-type: none"> • Implement diversity and inclusion training for faculty, staff, and students to promote a more inclusive and equitable environment. • Partner with community organizations and women's groups to raise awareness of STEM careers and provide mentorship and support to female students and researchers. • Adapt support services to the specific needs of female students and researchers, considering factors such as language, culture, and family responsibilities.



5 PROMOTE GENDER EQUITY IN FUNDING AND SUPPORT (VET PROVIDERS, HEIS)



6 ENSURE INCLUSIVE INTERNSHIP OPPORTUNITIES (ALL)

Action Plan 6	6. Ensure Inclusive Internship Opportunities (All)
 Description	<p>To provide practical work experience and career development opportunities for students from diverse backgrounds in the hydrogen industry, with a focus on engaging underrepresented groups.</p>
 Objective	<ul style="list-style-type: none"> ✓ <i>Increase the participation of students from underrepresented groups in internship programs and work-based learning (WBL) placements.</i> ✓ <i>Provide students from underrepresented groups with access to valuable work experience and professional development opportunities.</i> ✓ <i>Foster connections between students from underrepresented groups and industry professionals.</i> ✓ <i>Enhance the representation of students from underrepresented groups in the hydrogen industry workforce.</i>
 Target Audience	<ul style="list-style-type: none"> • Students from underrepresented groups interested in pursuing careers in the hydrogen industry. • Industry partners willing to provide internship placements.
 Proposed Activities/Steps	<ol style="list-style-type: none"> 1. Diversify Internship Programs: <ul style="list-style-type: none"> ➤ Develop internship programs specifically designed to attract and support students from underrepresented groups. ➤ Tailor internship programs to the specific needs and interests of students from underrepresented groups. ➤ Provide flexible internship options to accommodate the needs of students from diverse backgrounds. 2. Partnerships with Industry: <ul style="list-style-type: none"> ➤ Collaborate with a diverse range of industry partners across the hydrogen sector. ➤ Encourage industry partners to develop internship programs specifically for students from underrepresented groups. ➤ Provide industry partners with resources and support to create inclusive and equitable internship experiences. 3. Support and Mentorship: <ul style="list-style-type: none"> ➤ Provide additional support and mentorship to interns from underrepresented groups. ➤ Pair mentors with interns from underrepresented groups who have experience and expertise in the hydrogen industry. ➤ Organize workshops and events to provide interns from underrepresented groups with networking opportunities and professional development. 4. Selection Criteria for Underrepresented Groups:

- Consider the following factors when selecting students from underrepresented groups for internship programs:
 - Socioeconomic background
 - Educational background
 - Geographic location
 - Experience with STEM fields
 - Relevant skills and interests
 - Willingness to participate in diversity and inclusion initiatives

5. Evaluation and Monitoring:

- Establish clear and measurable evaluation criteria to assess the effectiveness of the internship program.
- Gather feedback from students, mentors, and industry partners to identify areas for improvement.
- Continuously refine the internship program based on feedback and evaluation results.



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- WP3: Task 3.7. VET teachers, students and staff mobility and industrial placement
- WP 5:
 - Task 5.2. Setup of knowledge focus groups for support of project activities between CoVEs
 - Task 5.5. Students, staff, and teachers practical skills training and mobility support across CoVEs

Examples - Best Practices

1. Internship Programme for Young Women in Green Hydrogen in South Africa

Funded by The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, this program targets unemployed female graduates. Interns are placed with industry players active in green hydrogen and Power-to-X in South Africa. The program includes practical on-site skills development, workshops, trainings, study tours, and networking events. [LEARN MORE](#)



2. Women in Power System Transformation (PST) Internship Program - USA

This four-month internship program offers mentorship, research, and leadership training for women and other underrepresented groups pursuing technical careers in power system operations. The program includes technical and professional training at the National Renewable Energy Laboratory (NREL) and the Electric Power Research Institute (EPRI). Participants engage in cutting-edge research on power system transformation (PST) and have opportunities to strengthen their technical competencies through applied problem-solving and analysis. [READ MORE](#)

3. Women in Energy Regulation Internship Program - Africa

Supported by the United States Agency for International Development (USAID) and Power Africa, this program aims to promote gender equity in the energy regulatory community. Launched in 2017, it provides opportunities for young women to gain foundational technical skills, professional experience, and knowledge by facilitating placements in short-term positions within their country's energy commissions. [READ MORE](#)



4. Joint Workforce Development Initiative for Women in Power System Operations

The Women in Power System Transformation initiative, launched by the USAID-NREL Partnership and the G-PST Consortium, focuses on increasing gender equality in the global transition to clean energy. It provides in-depth technical capacity building for women in emerging economies, preparing them for science and engineering roles in the evolving power sector. Key activities include developing a university-level course package, engineering training, and internships aimed at increasing gender equality within utilities and system operators. The initiative also offers upskilling and networking opportunities for women in utilities and system operators to advance their leadership roles. Additionally, it partners with programs addressing broader challenges women face in the workplace related to empowerment, negotiation, and leadership. This initiative is a critical step towards increasing women's participation in engineering programs and careers, fostering a more equitable, diverse, and innovative power system operations field. [LEARN MORE](#)





Timeline		
 Short-term	 Mid-term	 Long-term
Collaborate with industry partners to map available internships.(1-3 months)	Identify and recruit students from underrepresented groups and match them with internships. (6-12 months)	Evaluate the effectiveness of the internship program and make necessary adjustments. (12+ months)
 Success Metrics	<p><i>The effectiveness of the plan will be evaluated based on the following criteria:</i></p> <ul style="list-style-type: none"> • Increase in the number of students from underrepresented groups participating in internship programs: Ensure that ≥30% of internship placements are filled by students from underrepresented groups and a year-on-year increase of ≥20% in applications from these groups. • Positive feedback from students, mentors, and industry partners regarding the internship program: Achieve an average satisfaction rating of ≥85% from students, mentors, and industry partners regarding the internship program. • Increased representation of students from underrepresented groups in the hydrogen industry workforce: Attain a ≥50% employment rate in the hydrogen industry for students from underrepresented groups post-internship. 	
 Resources	<ul style="list-style-type: none"> • Dedicated budget for internship program coordination and support services. • Collaboration with industry partners to secure funding and resources. • Expertise in diversity, equity, and inclusion. 	
 Challenges	<ul style="list-style-type: none"> • Identifying and recruiting students from underrepresented groups with the necessary skills and experience. • Persuading industry partners to provide internship placements for students from underrepresented groups. • Addressing unconscious bias and creating a supportive and inclusive internship environment. 	 Mitigating Strategies
		<ul style="list-style-type: none"> • Build partnerships with community organizations, advocacy groups, and educational institutions to reach a wider range of students from underrepresented groups. • Utilize social media, networking events, and targeted outreach strategies to recruit industry partners. • Provide comprehensive training and support to mentors and industry partners to foster inclusive and equitable internship experiences. • Foster a culture of diversity and inclusion within the internship program and the broader hydrogen industry.



6 ENSURE INCLUSIVE INTERNSHIP OPPORTUNITIES (ALL)



7 ESTABLISH MENTORSHIP FOR STUDENTS FROM UNDERREPRESENTED GROUPS (ALL)

Action Plan 7	7. Establish Mentorship for Students from Underrepresented Groups (All)
 Description	<p>This action plan outlines the implementation of a mentorship program specifically designed to support marginalized students pursuing education and training in green hydrogen technology. The program aims to provide guidance, support, and professional development opportunities, enhancing the academic and career prospects of students from underrepresented groups in this field.</p>
 Objective	<ul style="list-style-type: none"> ✓ <i>Increase the participation of students from underrepresented groups in hydrogen technology education and training programs.</i> ✓ <i>Enhance the academic and professional development outcomes of marginalized students in the hydrogen sector.</i> ✓ <i>Create a supportive and inclusive environment for marginalized students in hydrogen technology education and training.</i> ✓ <i>Foster mentorship relationships between experienced professionals and marginalized students.</i> ✓ <i>Equip marginalized students with industry-relevant skills and knowledge to pursue careers in hydrogen technology.</i>
 Target Audience	<ul style="list-style-type: none"> • <i>Students from underrepresented groups enrolled in VET (Vocational Education and Training) and HEI (Higher Education Institution) programs related to hydrogen technology.</i>
 Proposed Activities/Steps	<ol style="list-style-type: none"> 1. Identify and recruit students from underrepresented groups <ul style="list-style-type: none"> ➤ Collaborate with VET providers (Vocational Education and Training) and HEIs (Higher Education Institutions) to identify and recruit marginalized students interested in hydrogen technology education and training programs. This could involve working with student organizations, outreach programs, and recruitment events (see relevant Action Plans). ➤ Develop clear and accessible recruitment materials that highlight the benefits of the mentorship program, such as guidance, support, and professional development opportunities. ➤ Conduct outreach activities to marginalized communities to raise awareness of the program and encourage students to apply. ➤ Implement a flexible and inclusive application process that accommodates the needs of students from diverse backgrounds. 2. Recruit mentors <ul style="list-style-type: none"> ➤ Identify and recruit experienced professionals from the hydrogen sector who are willing to serve as mentors to marginalized students. This could involve reaching out to professional associations, industry networks, and online platforms. ➤ Develop a comprehensive profile of the ideal mentor, including their skills, experience, and cultural sensitivity. ➤ Create a clear and concise description of the mentoring program to attract potential mentors.

- Offer incentives to mentors, such as professional development opportunities, networking connections, and the chance to make a positive impact on the lives of marginalized students.

3. Match mentors and mentees

- Develop a matching formula that takes into account the interests, experiences, and career aspirations of both mentors and mentees.
- Consider factors such as educational background, professional experience, and cultural background to ensure that the matches are as diverse and representative as possible.
- Provide mentors and mentees with an opportunity to review each other's profiles and express their preferences for a match.
- Facilitate initial conversations between mentors and mentees to gauge compatibility and address any concerns or reservations.

4. Organize mentor training

- Provide mentors with comprehensive training on effective mentoring practices, including active listening, providing constructive feedback, and setting clear expectations.
- Cover topics such as cultural sensitivity, addressing unconscious bias, and fostering open and inclusive communication.
- Emphasize the importance of building rapport, trust, and mutual respect between mentors and mentees.
- Encourage mentors to share their professional experiences, insights, and network connections to support the career development of mentees.

5. Establish regular mentorship meetings

- Schedule regular mentorship meetings between mentors and mentees, with the frequency and duration of meetings tailored to the needs of the pair.
- Provide mentors with guidance and support to facilitate effective mentorship sessions.
- Encourage mentees to actively participate in mentorship meetings, share their goals and challenges, and seek advice from mentors.
- Foster open communication and encourage mentors to provide honest and constructive feedback to mentees.



Application to H2Excellence Project

while mentoring is a component of the H2Excellence project, it is primarily oriented towards professional development, capacity building, and organizational support for partnership members, SMEs, and other relevant stakeholders, rather than direct student mentorship. However, this action aligns well with the overarching themes of several WPs, particularly those related to educational excellence, industry collaboration, and internships:

- Fostering Inclusion and Equity in Hydrogen Technology Education WP2
- Enhancing VET and HEI Programs WP 3
- Networking and Knowledge Sharing/Capacity Building WP5
- Professional Development and Industry Integration WP6

Examples - Best Practices

Women in Green Hydrogen (WiGH) Mentoring Programme

The WiGH Mentoring Program, aimed at young professionals in the green hydrogen sector, is designed to empower these professionals in the early stages of their careers through guidance from experienced experts in the field. The program includes one-on-one mentorship, networking opportunities, and discussions on topics relevant to green hydrogen. Mentors, who need over three years of work experience, and mentees, who should have up to three years of work experience, are paired based on mutual interests. They are expected to meet at least five times during the year-long program, with about two hours per month dedicated to program-related activities. Additional benefits include building knowledge, confidence, skills, and networks in the green hydrogen field. The program also addresses specific challenges faced by women in a male-dominated sector. Applications for mentors open from mid-May to mid-June, while mentee applications open in July, followed by matching in August and the official kick-off in September. The WiGH Mentoring Program began its third edition on September 2023, with a record 180 participants.

[LEARN MORE](#)







Timeline		
 Short-term	 Mid-term	 Long-term
Identify and recruit students, mentors, and establish mentorship program guidelines. (1-6 months)	Match mentors and mentees, conduct mentor training, and organize initial mentorship meetings. (6-12 months)	Continuously evaluate and refine the mentorship program, seeking feedback from mentors, mentees, and stakeholders. (12+ months)
 Success Metrics	<p><i>The effectiveness of the plan will be evaluated based on the following criteria:</i></p> <ul style="list-style-type: none"> Increase in the number of marginalized students enrolled in hydrogen technology education and training programs: Achieve a year-on-year increase of $\geq 20\%$ in the enrollment of marginalized students in green hydrogen technology education and training programs. Improvement in academic performance and career aspirations of marginalized students: Attain an average improvement of $\geq 10\%$ in academic grades and standardized test scores of marginalized students participating in the mentorship program. Positive feedback from mentors and mentees regarding the mentorship program: Achieve a satisfaction rate of $\geq 85\%$ among marginalized students participating in the mentorship program, as evidenced by surveys or feedback mechanisms. Increase in the number of marginalized students securing internships, apprenticeships, and employment in the hydrogen sector: Ensure that $\geq 40\%$ of marginalized students participating in the mentorship program secure internships, apprenticeships, or employment in the hydrogen sector within one year of program completion. 	
 Resources	<ul style="list-style-type: none"> Dedicated budget for mentorship program coordination and support services. Collaboration with VET providers, HEIs, and industry partners to secure additional resources. Expertise in mentorship, diversity, equity, and inclusion. 	
 Challenges	 Mitigating Strategies	
<ul style="list-style-type: none"> Identifying and engaging students from diverse backgrounds and communities. Attracting and retaining experienced mentors from the hydrogen sector. Fostering effective and culturally sensitive mentorship relationships. Ensuring that the mentorship program is accessible and inclusive for all participants. 	<ul style="list-style-type: none"> Build partnerships with community organizations, advocacy groups, and educational institutions to reach a wider range of marginalized students. Utilize social media, networking events, and targeted outreach strategies to recruit mentors from diverse backgrounds. Provide mentors with ongoing training and support to enhance their cultural competence and mentorship skills. Foster a supportive and inclusive environment for all mentors and mentees to ensure open communication, mutual respect, and a sense of belonging. 	




7 ESTABLISH MENTORSHIP FOR STUDENTS FROM UNDERREPRESENTED GROUPS (ALL)



8 ENSURE STEM PATHWAYS FOR WOMEN (VET PROVIDERS, HEIS)

Action Plan 8	<h2 style="text-align: center;">8. Ensure STEM Pathways for Women (VET Providers, HEIs)</h2>
 Description	<p>To create specialized outreach and promotional programs encouraging women to pursue STEM education and careers in the hydrogen sector.</p>
 Objective	<ul style="list-style-type: none"> ✓ <i>Increase the number of women pursuing STEM education and careers in the hydrogen sector.</i> ✓ <i>Address the gender imbalance in the hydrogen industry and promote a more equitable and inclusive STEM workforce.</i> ✓ <i>Empower women to succeed in STEM fields and contribute to the development of the hydrogen economy.</i>
 Target Audience	<ul style="list-style-type: none"> • Female students interested in STEM fields, particularly in hydrogen-related studies and careers. • VET Providers (Vocational Education and Training) and HEIs (Higher Education Institutions) with programs related to STEM fields.
 Proposed Activities/Steps	<ol style="list-style-type: none"> 1. Development of Women-focused Promotion STEM Programs: <ul style="list-style-type: none"> ➤ Design and implement specialized STEM promotional programs specifically tailored for women interested in hydrogen technology. ➤ Address the unique challenges and opportunities faced by women in STEM fields, such as gender stereotypes and unconscious bias. ➤ Provide female students with mentorship and support from female role models and professionals in the hydrogen sector. ➤ Offer flexible and accessible learning formats to accommodate the needs of female students with diverse backgrounds and commitments. 2. Mentorship and Networking Opportunities: <ul style="list-style-type: none"> ➤ Facilitate mentorship programs linking female students with female professionals in the hydrogen industry. ➤ Provide opportunities for female students to network with other women in STEM fields and with industry leaders. ➤ Organise events and workshops to foster a supportive and inclusive community for women in STEM. ➤ Encourage the development of peer-to-peer mentoring relationships among female students and professionals. (see also Action Plan 7) 3. Career Fairs and Speaker Events: <ul style="list-style-type: none"> ➤ Organize career fairs specifically for women interested in STEM careers in the hydrogen sector. ➤ Invite successful women in the hydrogen industry to speak at events and workshops, sharing their experiences and insights. ➤ Provide female students with information about internships, apprenticeships, and job opportunities in the hydrogen sector. ➤ Collaborate with industry partners to offer targeted recruitment opportunities for female STEM graduates.

	<p>4. Partnerships with Industry:</p> <ul style="list-style-type: none"> ➤ Build partnerships with industry leaders in the hydrogen sector to support women-focused STEM initiatives. ➤ Encourage industry partners to provide funding and resources for women's STEM programs and events. ➤ Advocate for policies and practices that promote gender equality and inclusion in the hydrogen industry. <p>5. Policy Recommendations and Advocacy:</p> <ul style="list-style-type: none"> ➤ Develop policy recommendations and advocacy strategies to address the underrepresentation of women in STEM. ➤ Collaborate with policymakers and industry leaders to implement gender-inclusive STEM policies and practices.
 <p>Application to H2Excellence Project</p>	<ul style="list-style-type: none"> • WP3 all Tasks, especially Task 3.2. Design and deployment of EQF level 3-5 training programme • Task 4.5. Design and planning of a joint learning environment/lab for all education providers • Task 4.6. Design and deploying transnational training, collaboration and networking events between CoVEs, VET providers, businesses, and scientific community • Task 5.3. Capacity building and horizontal online advisory service between CoVEs across EU • Task 5.5. Students, staff, and teachers practical skills training and mobility support across CoVEs

Examples - Best Practices

1. Relevant ERASMUS+ Projects

a. FEMST project



The FEMST Research project is an Erasmus+ funded initiative that aims to provide in-depth information about the gender gap that is relevant with gender equality in STEM fields at its early stages, when Teachers' gender biases affect the performance of pupils. FEMST will support teachers on inspiring STEM among the female students and address the needs of women studying in STEM in order to reduce the dropout rate long-term. The goal of FEMST is to offer in-depth information and knowledge about the gender gap in the STEM field in Europe, especially in the countries of the consortium (Netherlands, Cyprus, Greece, Spain and Portugal) for their personal and/or professional development, ultimately for the benefit of the students they are responsible for. The online platform will provide teachers/academic staff/STEM students a common online space, tools and resources to obtain knowledge and practical experience related to the issues regarding girls in STEM. The FEMST Training Package for teachers and academic staff will be available in 4 languages and will be open for registration in early 2024. [LEARN MORE](#)

b. END GBV in VET

The END GBV in VET Project (“Full service to increase capacity and awareness for disrupting gender-based violence in the VET sphere”, Project 101049592 — CERV-2021-DAPHNE) focuses on piloting a full service as support offices for VET providers so as to increase the capacity and awareness for disrupting gender-based violence in the VET sphere. This will be achieved by capacity building of students, their teachers/staff, and interested parents in addressing issues relevant to GBV, strengthening existing structures of the institutions by the integrated approach through the operation of a full service in the campus that will provide information, training, support, and consultations. END GBV in VET is coordinated by EVBB, also member of the H2Excellence CoVE project. [LEARN MORE](#)



2. Other Initiatives

a. STEM Programs for Women and Girls at the Energy Department – USA

The U.S. Department of Energy, via its Office of Energy Justice and Equity, provides an array of STEM (science, technology, engineering, and mathematics) programs, aimed specifically at encouraging the participation of women, girls, and other underrepresented groups. These initiatives are designed to counteract the disproportionate underrepresentation of these groups in the STEM workforce. Key offerings include summer research opportunities, technical skill development, resources and leadership training to promote equality in STEM, as well as advocacy groups. The programs also focus on inspiring and connecting women to clean energy issues and supporting their progression into leadership roles. Additionally, there are scholarships available for students who complete STEM-focused programs and numerous mentor-intensive research experiences. Collectively, these programs underscore the Department of Energy’s dedication to fostering diversity and inclusion in STEM fields, thus preparing a skilled and diverse future workforce. [READ MORE](#)

b. Women in STEM (WiSTEM)



This platform is dedicated to empowering and encouraging high school girls to participate in STEM fields, aiming to increase female representation. The platform features a variety of resources and community engagement opportunities such as the Cubby Column, a space for sharing free resources, books, and research. WiSTEM showcases inspirational stories of its members and their commitments to increasing female presence in STEM careers and academic fields. It hosts various events and provides avenues for involvement, including ambassador programs and partnerships. The platform emphasizes outreach, mentorship, and networking initiatives, working towards gender equality in STEM across a diverse range of chapters and members globally. To explore more about WiSTEM and their initiatives, visit [Women in STEM](#).





Timeline		
 Short-term	 Mid-term	 Long-term
Develop and launch women-focused STEM programs, mentorship initiatives, and career networking events. (1-3 months)	Establish partnerships with industry and advocate for gender-inclusive STEM policies. (3-6 months)	Continuously evaluate and refine the program, ensuring its effectiveness in promoting STEM pathways for women in the hydrogen sector. (12+ months)
 Success Metrics	<p><i>The effectiveness of the plan will be evaluated based on the following criteria:</i></p> <ul style="list-style-type: none"> • Increase in the number of women pursuing STEM education and careers in the hydrogen sector: Achieve a year-on-year increase of $\geq 15\%$ in the enrollment of female students in STEM programs focused on hydrogen technology. • Improved representation of women in STEM fields and in leadership positions within the hydrogen industry: Attain a minimum of 30% representation of women in STEM fields related to hydrogen technology at entry-level, 25% at mid-level, and 20% at senior levels in the workforce. • Increased satisfaction and engagement among female students participating in women-focused STEM programs: Achieve an average satisfaction rating of $\geq 85\%$ among female students in women-focused STEM programs related to hydrogen technology. • Greater awareness of the benefits and opportunities for women in STEM careers in the hydrogen sector: Increase awareness levels by $\geq 25\%$ among female students and potential candidates about the opportunities and benefits of pursuing STEM careers in the hydrogen sector, as measured through surveys and feedback. 	
 Resources	<ul style="list-style-type: none"> • Dedicated budget for women-focused STEM programs, mentorship, and networking activities. • Collaboration with industry partners to secure funding, resources, and expertise. • Expertise in STEM education, gender equality, and advocacy for women's rights. 	
 Challenges	 Mitigating Strategies	
<ul style="list-style-type: none"> • Addressing gender stereotypes and unconscious bias that can discourage women from pursuing STEM fields. • Overcoming the lack of role models and mentors for women in STEM fields. • Creating a supportive and inclusive environment for women in STEM education and workplaces. 	<ul style="list-style-type: none"> • Implement targeted outreach and recruitment strategies to reach and engage women from diverse backgrounds. • Foster a culture of mentorship and peer support among women in STEM. • Provide comprehensive training and support to educators, mentors, and industry partners on gender equality and inclusivity in STEM. 	




7 ENSURE STEM PATHWAYS FOR WOMEN (VET PROVIDERS, HEIS)



9 ORGANIZE PEER NETWORKING EVENTS (VET PROVIDERS, HEIS)

Action Plan 9	9. Organize Peer Networking Events (VET Providers, HEIs)
 Description	Organize networking events that facilitate connections and collaborations among diverse members of the CoVE environment, including students, educators, researchers and industry professionals.
 Objective	✓ <i>To promote an inclusive networking culture within the H2Excellence CoVE environment, fostering connections and collaboration opportunities among diverse stakeholders.</i>
 Target Audience	<ul style="list-style-type: none"> • <i>Students (VET and HE level) participating in project activities</i> • <i>Educators from VET and HEIs involved in H2Excellence initiatives</i> • <i>Industry professionals working in the hydrogen sector</i>
 Proposed Activities/Steps	<ol style="list-style-type: none"> 1. Develop a comprehensive networking calendar: <ul style="list-style-type: none"> ➤ Create a schedule of regular networking events, including virtual and in-person gatherings, to ensure a steady stream of opportunities for participants to connect. 2. Host virtual networking events: <ul style="list-style-type: none"> ➤ Leverage virtual platforms to facilitate connections among participants from diverse locations and time zones. ➤ Utilize video conferencing tools, chat features, and breakout rooms to encourage interactions and group discussions. 3. Organize in-person networking events: <ul style="list-style-type: none"> ➤ Host physical gatherings in different locations to foster face-to-face interactions and build stronger relationships. ➤ Choose venues with accessible facilities and inclusive environments that cater to the needs of all participants. 4. Tailor events to specific stakeholder groups: <ul style="list-style-type: none"> ➤ Organize separate networking events for students, educators, and industry professionals to address their unique interests and needs. This approach can foster deeper connections within specific groups and promote cross-pollination of ideas. 5. Incorporate diversity-focused panels and discussions: <ul style="list-style-type: none"> ➤ Feature diverse speakers and panel discussions on topics relevant to diversity, equity, and inclusion (DE&I) in the hydrogen sector. ➤ Encourage open and respectful dialogue on challenging issues and seek to foster a sense of shared responsibility for creating an inclusive community. 6. Promote collaborative opportunities:

	<ul style="list-style-type: none"> ➤ Design networking events to encourage project collaborations and partnerships among participants. ➤ Facilitate interactions between students, educators, and industry professionals to explore potential joint projects, research endeavors, or business opportunities. <p>7. Utilize online networking platforms:</p> <ul style="list-style-type: none"> ➤ Create and maintain online networking platforms to connect participants beyond the event dates. ➤ Encourage regular engagement and interaction on these platforms to maintain the momentum of the H2Excellence networking network. <p>8. Gather feedback and evaluate effectiveness:</p> <ul style="list-style-type: none"> ➤ Regularly gather feedback from participants to assess the effectiveness of networking events and identify areas for improvement. ➤ Use this feedback to refine the format, content, and organization of future events.
 <p>Application to H2Excellence Project</p>	<ul style="list-style-type: none"> • WP 4 Cooperation, partnerships, and networking <ul style="list-style-type: none"> Task 4.2. Education-business-research partnership forum development Task 4.6. Design and deploying transnational training, collaboration and networking events between CoVEs, VET providers, businesses, and scientific community Task 4.7. Establish and formalize a VET internationalization plan • WP5 Task 5.1. CoVE governance, operational structure, and network expansion <ul style="list-style-type: none"> Task 5.3. Capacity building and horizontal online advisory service between CoVEs across EU • WP6: Task 6.1. Integration with national/regional economic and innovation ecosystems & site visits <ul style="list-style-type: none"> Task 6.2. Dissemination, communication, public awareness, and vocational training promotion








Examples - Best Practices

Peer Networks Example



“Youth for Green Hydrogen” is an energetic and inclusive network dedicated to enhancing the role of young individuals in the Green Hydrogen sector. With a mission to combat the climate crisis, this organization emphasizes the crucial role of green technology, especially Green Hydrogen, in reducing reliance on fossil fuels. It actively promotes local GH₂ production involving community members, particularly focusing on the inclusion of young women, men, and indigenous communities. The organization champions intergenerational partnerships and a life-cycle approach to education, aiming to create a sustainable future where Green Hydrogen is a primary energy source. [READ MORE](#)

- See also Plan 15 Examples – Best Practices for Women Organizations





Timeline		
 Short-term	 Mid-term	 Long-term
Develop networking calendar (0-4 months)	Host virtual networking events, organize in-person networking events, host diversity-focused panels and discussions and Promote collaborative opportunities (6-12 months)	Gather feedback and evaluate effectiveness (12+ months)
 Success Metrics	<p><i>The effectiveness of the plan will be evaluated based on the following criteria:</i></p> <ul style="list-style-type: none"> • Number of participants engaged in networking events: 10% increase in the number of participants registered for and actively participating in peer networking events each year. • Percentage of participants who form new connections or collaborations: 15% increase in the percentage of participants who report forming new connections or collaborations with individuals from diverse backgrounds and expertise each year. • Positive feedback from participants regarding the effectiveness of networking events: 80% satisfaction rate among participants who provide feedback on the effectiveness of networking events in facilitating connections, knowledge sharing, and overall engagement each year. • Increased visibility of diversity and inclusion initiatives within the H2Excellence consortium: 50% increase in the number of media mentions, publications, and presentations highlighting the H2Excellence consortium's commitment to DE&I and its implementation through peer networking events each year. 	
 Resources	<ul style="list-style-type: none"> • Dedicated budget for networking event expenses • Collaboration with external event organizers or platforms • Support from H2Excellence project management team • Participation from diverse stakeholders 	
 Challenges	Mitigating Strategies 	
<ul style="list-style-type: none"> • Balancing virtual and in-person networking events • Engaging diverse stakeholders from different backgrounds and locations • Facilitating meaningful connections and collaborations • Addressing cultural and linguistic differences 	<ul style="list-style-type: none"> • Utilize a variety of online platforms and tools to support both virtual and in-person networking. • Tailor event formats and content to specific stakeholder groups. • Emphasize the importance of active listening, empathy, and respectful communication. • Provide cultural sensitivity training for participants and organizers. 	



9 ORGANIZE PEER NETWORKING EVENTS (VET PROVIDERS, HEIS)



10 FOSTER VISIBILITY AND RECOGNITION INITIATIVES (ALL)

<p>Action Plan 10</p>	<p>10. Foster Visibility and Recognition Initiatives (All)</p>	
<p> Description</p>	<p>Launch initiatives to amplify the contributions of women leaders in the hydrogen sector, highlighting their achievements, inspiring others, and promoting gender diversity in the industry.</p>	
<p> Objective</p>	<ul style="list-style-type: none"> ✓ <i>Recognize and celebrate the achievements of women in the hydrogen sector.</i> ✓ <i>Inspire and encourage more women to pursue leadership roles in this field.</i> ✓ <i>Raise awareness about the importance of gender diversity in the energy sector.</i> ✓ <i>Create a more inclusive and equitable workplace for women in the hydrogen sector.</i> 	
<p> Target Audience</p>	<ul style="list-style-type: none"> • Women leaders in the hydrogen sector • Emerging female professionals in the hydrogen sector • Industry stakeholders, including companies, universities, and government agencies • Public and media representatives 	
<p> Proposed Activities/Steps</p>	<ol style="list-style-type: none"> 1. Awards Program: <ul style="list-style-type: none"> ➤ Establish an annual award to honor outstanding women leaders in the hydrogen sector. Categories could include innovation, leadership, sustainability, and contributions to diversity and inclusion. 2. Featured Profiles: <ul style="list-style-type: none"> ➤ Regularly feature profiles of successful women leaders in the hydrogen sector on the project's website, social media, and industry publications. These profiles can highlight their career paths, achievements, and contributions to the sector. 3. Speaker Series: <ul style="list-style-type: none"> ➤ Organize a series of talks and panel discussions (events, videos or podcasts) featuring women leaders at industry conferences and events. 4. Mentorship Program: <ul style="list-style-type: none"> ➤ Pair emerging female professionals with established women leaders in the hydrogen sector through a structured mentorship program. 5. Industry Events: <ul style="list-style-type: none"> ➤ Organize a dedicated track at industry conferences and events to showcase the contributions of women leaders. 6. Social Media Campaign: <ul style="list-style-type: none"> ➤ Launch a social media campaign to promote women leaders in the hydrogen sector, using the hashtag <i>#WomenInH2Excellence</i>. 7. Partnerships with Organizations: <ul style="list-style-type: none"> ➤ Collaborate with organizations that support women in STEM and leadership development, such as <i>Women in Green Hydrogen</i>, to expand the reach of visibility and recognition initiatives. (see Plan 15) 	



Application to H2Excellence Project

- Task 4.3. Open innovation, competitions and flagship projects design and deployment with universities, R&D, and industry
- Task 5.4. Knowledge transfer, sharing of best practices in fuel cells and green hydrogen & site visits
- Task 6.1. Integration with national/regional economic and innovation ecosystems & site visits
- Task 6.2. Dissemination, communication, public awareness, and vocational training promotion

Examples - Best Practices

1. International Equality Initiative Awards Program



The International Equality Initiative Awards Program, established by the Equality in Energy Transitions Initiative, aims to promote gender equality in the clean energy sector. This program recognizes individuals and organizations contributing to a low carbon economy by advancing women's participation in clean energy. The Awards Program has three categories: The Woman of Distinction Award for exceptional women in energy, the Organizational Award for entities supporting women's careers in clean energy, and the Emerging Leader in Renewable Energy Award for individuals showing promise in advancing women's roles in renewable energy. Canada, with support from Equality Initiative members and Women in Renewable Energy (WiRE), leads the program, highlighting leadership, innovation, and community engagement in clean energy. [LEARN MORE](#)

2. Women in Energy - USA



The Women in Energy series is a joint project between United States Energy Association (USEA) and United States Agency for International Development (USAID) that was developed out of USEA's Engendering Utilities Partnership, a program funded by USAID to improve gender policies and gender outcomes at their respective organizations. Every month a woman who has shown exemplary leadership in the energy sector is featured in an interview. [READ MORE](#)

3. Women in Hydrogen 50 – UK/Global

This initiative by Hydrogen Economist (Petroleum Economist Media Network's hydrogen stream) profiles 50 influential and boundary-pushing women in the hydrogen industry. It recognizes women across five distinct categories: Projects and Partnerships, Technology and Innovation, Policy and Regulation, Industrial Use and Switching, and Rising Stars. The aim is to celebrate women who are making significant contributions to the hydrogen economy and supporting diversity, equity, and inclusion initiatives. [LEARN MORE](#)



Timeline		
Short-term	Mid-term	Long-term
Awards Program, Featured Profiles, Speaker Series (1 year)	Mentorship Program, Industry Events, Social Media Campaign, Partnerships with Organizations (2-3 years)	Monitor and Evaluate effectiveness (ongoing)
Success Metrics	<p><i>The effectiveness of the plan will be evaluated based on the following criteria:</i></p> <ul style="list-style-type: none"> • Number of women leaders featured in industry publications and events: Feature at least 25 women leaders annually in industry publications and events. • Increase in applications for the awards program: Achieve a $\geq 20\%$ annual increase in applications for awards programs dedicated to recognizing women in the hydrogen sector. • Positive feedback from participants of speaker series and mentorship program: Attain a satisfaction rate of $\geq 85\%$ from participants in speaker series and mentorship programs that promote women leaders in the hydrogen sector. • Increase in media coverage of women leaders in the hydrogen sector: Secure a $\geq 30\%$ increase in media coverage featuring women leaders in the hydrogen sector annually. • Increase in the number of women pursuing leadership roles in the hydrogen sector: Achieve a $\geq 25\%$ increase in the number of women advancing into leadership roles within the hydrogen sector annually. 	
Resources	<ul style="list-style-type: none"> • Dedicated budget for awards, events, and marketing materials • Collaboration with industry partners and organizations • Support from H2Excellence project management team • Access to media and public relations channels 	
Challenges	Mitigating Strategies	
<ul style="list-style-type: none"> • Identifying and reaching a diverse audience of women in the hydrogen sector • Overcoming unconscious bias and stereotypes in the industry • Ensuring that visibility and recognition initiatives are inclusive and accessible to all women in the hydrogen sector 	<ul style="list-style-type: none"> • Collaborate with organizations that represent women in STEM and leadership development to reach a wider audience. • Emphasize the diversity of women in the hydrogen sector through the selection of awards recipients, speakers, and mentors. • Use inclusive language and messaging in all communications related to visibility and recognition initiatives. 	








10

**FOSTER VISIBILITY AND RECOGNITION
INITIATIVES
(ALL)**



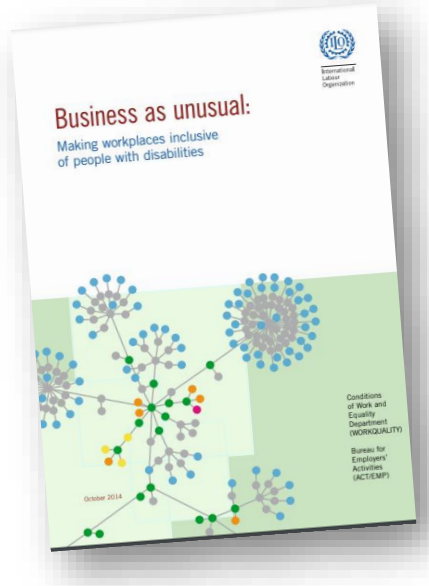
11 IMPROVE ACCESSIBILITY IN WORKPLACES (INDUSTRY)

<p>Action Plan 11</p>	<p>11. Improve Accessibility in Workplaces (Industry)</p>
<p> Description</p>	<p>Enhance physical and digital workplace accessibility in workplace, ensuring that all employees, including those with disabilities, can fully participate and contribute in a supportive and inclusive environment.</p>
<p> Objectives</p>	<ul style="list-style-type: none"> ✓ <i>To create a workplace environment that is accessible and inclusive for all employees, regardless of their disability status.</i> ✓ <i>To empower employees with disabilities to fully participate and contribute in their workplaces.</i> ✓ <i>To foster a culture of equity and respect for diversity in the workplace.</i>
<p> Target Audience</p>	<ul style="list-style-type: none"> • <i>Companies within the hydrogen value chain.</i> • <i>Employees with disabilities working in these companies.</i>
<p> Proposed Activities/Steps</p>	<ol style="list-style-type: none"> 1. Workplace Accessibility Audit: <ul style="list-style-type: none"> ➤ Conduct comprehensive audits of company facilities, including offices, meeting rooms, restrooms, and common areas, to identify areas needing improvement. ➤ Utilize standardized accessibility guidelines and checklists to ensure thoroughness and consistency. ➤ Prioritize areas with the highest impact on employee accessibility, such as entrances, exits, workstations, and restrooms. ➤ Ensure that digital accessibility is a major focus, not just physical accessibility. This includes accessible software, websites, and digital communication tools, which are essential for inclusive work environments (see also Action Plan No 4). 2. Accessibility Upgrades: <ul style="list-style-type: none"> ➤ Implement necessary physical and digital accessibility upgrades, including modifications to signage, flooring, restroom facilities, and information technology infrastructure. ➤ Consult with experts in accessibility and disability-related issues to ensure the effectiveness of upgrades. ➤ Incorporate universal design principles to create a more inclusive and adaptable workplace environment. ➤ Offer flexible work arrangements, such as remote work options or adjustable schedules (see also plan 12 on Inclusive Workplace Culture) 3. Employee Training: <ul style="list-style-type: none"> ➤ Provide training to employees on supporting colleagues with disabilities, including understanding different types of disabilities, communication strategies, and workplace accommodations. Incorporate training modules that focus on unconscious bias and disability etiquette ➤ Offer training sessions tailored to specific departments or roles, such as HR personnel, managers, and IT support staff.

	<ul style="list-style-type: none"> ➤ Encourage open communication and collaboration among employees to foster an inclusive and respectful work environment. <p>4. Collaboration with Disability Organizations:</p> <ul style="list-style-type: none"> ➤ Partner with disability advocacy groups and organizations to gain insights and expertise in workplace accessibility. ➤ Seek guidance on best practices, identify potential challenges, and develop tailored solutions. ➤ Collaborate on awareness campaigns and training programs to promote inclusive workplace practices. <p>5. Continuous Monitoring and Evaluation:</p> <ul style="list-style-type: none"> ➤ Establish ongoing mechanisms to monitor the effectiveness of accessibility improvements and address any emerging issues. ➤ Gather feedback from employees with disabilities to identify areas for further improvement. Engage employees with disabilities in decision-making processes ➤ Conduct regular audits to ensure that accessibility upgrades are maintained and remain effective.
 <p>Application to H2Excellence Project</p>	<ul style="list-style-type: none"> • Task 4.4. Training and technical support for SMEs in green hydrogen technologies • Task 6.6. Development of strategy, business model and sustainability plan for CoVEs post-project

Examples - Best Practices

“Business as unusual” A guide from ILO on making workplaces inclusive of people with disabilities



This publication, titled "Business as unusual: Making workplaces inclusive of people with disabilities," is a comprehensive guide from the International Labour Office. Published in 2014, it addresses the vital role of disability inclusion in the workplace and presents a convincing business case for employing people with disabilities. It explores key drivers for such employment, including corporate social responsibility, legislation, and the positive impact on company culture and productivity. Additionally, the publication showcases various successful practices from global companies like Accenture, IBM, and Carrefour, emphasizing the practical aspects of implementing disability inclusion strategies. These examples highlight the importance of top management support, cultural sensitivity, and the involvement of people with disabilities in developing inclusion initiatives. This guide serves as an inspiration and blueprint for businesses aiming to foster inclusive work environments that value diversity and harness the unique talents of all employees. [READ MORE](#)

Timeline		
Short-term	Mid-term	Long-term
Workplace Accessibility Audit, Collaboration with Disability Organizations	Accessibility Upgrades,	Continuous Monitoring and Evaluation, Benchmarking and Sharing Best Practices
Success Metrics	<p><i>The effectiveness of the plan will be evaluated based on the following criteria:</i></p> <ul style="list-style-type: none"> Percentage of identified accessibility gaps that are addressed within the specified timeframe: ≥90% success rate Percentage of accessibility upgrades completed within the specified timeframe: ≥85% success rate Number of employees with disabilities who report improved accessibility and usability of the workplace: Achieve a ≥75% rate of positive feedback Percentage of employees who participate in accessibility training: Achieve a ≥70% participation rate 	
Resources	<ul style="list-style-type: none"> <i>Dedicated budget for accessibility improvements, training, and evaluation</i> <i>Partnerships with disability advocacy groups and organizations</i> <i>Expertise in accessibility standards, design principles, and implementation</i> <i>Support from management and leadership</i> 	
Challenges	Mitigating Strategies	
<ul style="list-style-type: none"> Identifying and prioritizing accessibility gaps in company facilities Securing funding and resources for accessibility upgrades Ensuring effective communication and collaboration among employees, supervisors, and management Addressing attitudinal barriers and misconceptions about disability Maintaining and updating accessibility improvements over time 	<ul style="list-style-type: none"> Conduct comprehensive accessibility audits to accurately assess the current state of the workplace. Develop a detailed budget and funding plan to support accessibility initiatives. Establish clear communication channels and guidelines for employees, supervisors, and management. Provide ongoing training and awareness programs to foster inclusive workplace practices. Develop a comprehensive maintenance plan to ensure the ongoing effectiveness of accessibility upgrades. 	







11

IMPROVE ACCESSIBILITY IN WORKPLACES (INDUSTRY)



12 PROMOTE AN INCLUSIVE WORKPLACE CULTURE (INDUSTRY)



<p>Action Plan 12</p>	<p>12. Promote an Inclusive Workplace Culture (Industry)</p>
<p> Description</p>	<p>Foster a workplace culture that is welcoming to all employees, regardless of their background. This can be achieved through regular DE&I training, inclusive company policies, and employee engagement initiatives.</p>
<p> Objectives</p>	<ul style="list-style-type: none"> • <i>Educate and empower employees on DE&I principles and practices.</i> • <i>Implement inclusive company policies that reflect our commitment to diversity and inclusion.</i> • <i>Foster a culture of belonging and respect where all employees feel valued and included.</i> • <i>Engage and empower employees to contribute to DE&I initiatives.</i>
<p> Target Audience</p>	<p>All employees, including leadership, managers, and support staff.</p>
<p> Proposed Activities/Steps</p>	<p>6. Establish an Ongoing DE&I Training Program for All Employees</p> <ul style="list-style-type: none"> ➤ Develop a comprehensive DE&I training program that covers a range of topics, such as unconscious bias, microaggressions, inclusive communication, and cultural competency. ➤ Align the training program with the organization's specific DE&I goals and objectives. ➤ Ensure that the training program is accessible to all employees regardless of their location or work schedule. ➤ Offer the training program in multiple formats, such as online courses, in-person workshops, and self-paced modules. Provide opportunities for employees to practice what they learn through role-playing exercises, peer feedback, and mentorship opportunities. ➤ Track employee attendance and engagement in the training program to measure its effectiveness. ➤ Continuously evaluate and refine the training program based on feedback from employees and experts. ➤ Ensure sustainability by conducting regular DE&I Workshops and Seminars, inviting experts, providing tools and resources to employees. <p>7. Review and Update Company Policies to Ensure They Are Inclusive and Equitable</p> <ul style="list-style-type: none"> ➤ Conduct a comprehensive review of all company policies to identify any potential biases or discriminatory language. ➤ Consult with legal and HR experts to ensure that policies are compliant with all applicable laws and regulations. ➤ Engage with employee resource groups and advocacy organizations to get their input on policy changes.

- Involve employees in the process of revising and updating policies to ensure that they reflect the organization's commitment to DE&I.
- Communicate policy changes clearly and consistently to all employees.
- Provide training and support to employees to help them understand the new policies.
- Monitor and evaluate the impact of policy changes on the workplace culture.

8. Create a Company-Wide DE&I Committee to Oversee DE&I Initiatives and Provide Guidance

- Establish a DE&I committee with representation from all levels of the organization and diverse backgrounds.
- Provide the committee with the resources and support they need to carry out their responsibilities.
- Assign clear roles and responsibilities to committee members.
- Ensure that the committee has a clear mandate and a plan of action.
- Provide regular opportunities for the committee to share their progress and insights with the broader organization.

9. Ensure family friendly policies especially for mothers, new mothers re-entering the workforce, single mothers


- Implement flexible work arrangements, such as flextime, telecommuting, and compressed workweeks, to accommodate the needs of working mothers and families.
- Provide generous parental leave policies that allow mothers and fathers to bond with their newborns and care for their families without sacrificing their careers.
- Offer job sharing and part-time opportunities to enable mothers to balance work and family commitments.
- Collaborate with new mothers to develop flexible return-to-work plans that allow them to ease back into their roles without overwhelming them. Communicate clearly about expectations and performance requirements for new mothers returning to the workforce to ensure a smooth transition.
- Provide access to supporting services, such as lactation rooms and childcare options, to accommodate the needs of mothers.
- Offer flexible dress codes to accommodate maternity as well as the religious and cultural practices of minority groups.

10. Establish and Provide services to ensure a safe and healthy environment

- Establish Employee Assistance Programs (EAPs) to provide confidential counseling and support.
- Offer comprehensive wellness programs that promote physical and mental health, including stress management, nutrition counseling, and exercise classes.
- Encourage the establishment of Employee Resource Groups (ERGs) i.e. voluntary, employee-led groups that are formed around shared interests, identities, or experiences.

11. Host Events and Activities That Celebrate Diversity and Inclusion throughout the year.

- Encourage employees to participate in these events and activities.
- Highlight the contributions of diverse employees to the organization's success.
- Recognize and celebrate milestones that demonstrate progress in DE&I efforts.

	<ul style="list-style-type: none"> ➤ Create a sense of community and belonging among employees from all backgrounds. ➤ Foster a culture of openness and acceptance. <p>12. Establish an Open-Door Policy for Employees to Address Any Concerns Related to DE&I</p> <ul style="list-style-type: none"> ➤ Designate a point of contact for employees to raise concerns about DE&I issues. ➤ Encourage employees to report any incidents of discrimination or harassment. ➤ Take appropriate action to address any violations of DE&I policies. Implement crisis support mechanisms, such as confidential hotlines and counseling services, to provide immediate assistance to employees experiencing discrimination or harassment. ➤ Investigate all complaints promptly and fairly. ➤ Provide support and resources to employees who have experienced discrimination or harassment. ➤ Communicate the findings of investigations to all employees to promote transparency and accountability.
 <p>Application to H2Excellence Project</p>	<ul style="list-style-type: none"> • Task 4.4. Training and technical support for SMEs in green hydrogen technologies • Task 6.6. Development of strategy, business model and sustainability plan for CoVEs post-project

Examples - Best Practices

1. Equal by 30

Equal by 30 is an initiative led by Canada and part of Equality in Energy Transitions initiative, aiming to achieve equal pay, leadership, and opportunities for women in the clean energy sector by 2030. This campaign, involving both public and private sector organizations, stresses the vital role of gender diversity in driving profits and efficiency in the transition to a clean energy economy. Organizations participating in Equal by 30 are encouraged to endorse and implement principles that promote women's participation in the energy sector to help close the gender gap. These principles include *integrating equality into organizational policies, emphasizing gender diversity in recruitment and career advancement, sharing best practices, and maintaining transparency and accountability through regular progress reporting*. This collective effort underscores a strong commitment to gender equality as a key element in the development of the clean energy sector. [LEARN MORE](#)



2. MothersCan

The MothersCan is an innovative ERASMUS+ Project on adult education with the overall objective of supporting mothers' empowerment, professional development, long-term reintegration into the labour market through their empowerment and the acquisition of entrepreneurial competences. The project also foresees the development of an online training package for Employers and Hiring Managers in order to help them create a more



inclusive environment for Mothers. The “Changing the Style” training package will be available on Summer 2024. The project is coordinated by PLAN B, Germany in collaboration with organizations from Greece, Cyprus, Spain, Romania, and Belgium. [LEARN MORE](#)

3. Employee resource groups (ERGs)

Employee resource groups (ERGs) are voluntary, employee-led groups that are formed around shared interests, identities, or experiences (e.g. Women in Technology or LGBTQ+ Employee Resource Group). ERGs provide a safe and supportive space for employees to connect, share experiences, and advocate for their respective communities. They can also play a role in educating the broader workforce about diversity and inclusion issues.

Employee resource groups (ERGs) and DE&I committees are both important components of a workplace culture that promotes diversity, equity, and inclusion. However, they have different roles and responsibilities. While ERGs are voluntary, employee-led groups, DE&I committees are typically formed by management or HR to oversee the organization's overall DE&I efforts. They are responsible for developing and implementing DE&I strategies, tracking progress, and ensuring that the organization is meeting its DE&I goals.

Here is a table summarizing the key differences between ERGs and DE&I committees:

Feature	Employee Resource Group (ERG)	DE&I Committee
Structure	Voluntary, employee-led	Formed by management or HR
Focus	Shared interests, identities, or experiences	Overall DE&I efforts
Activities	Networking, mentorship, advocacy, education	Strategy development, implementation, tracking, and oversight
Membership	Open to employees who share the group's interests	Typically includes representatives from all levels of the organization
Reporting	To the organization's leadership	To the organization's leadership or the ERG stakeholders

4. DE&I Metrics

A. Representation of diverse groups in leadership and management positions (Employee Diversity Ratio)

Achieving diversity in leadership and management positions is critical for ensuring that the organization's decision-making processes are representative of the broader workforce. Diverse leaders can bring new perspectives, experiences, and ideas to the organization, which can lead to improved innovation, problem-solving, and decision-making. A lack of diversity in leadership can create a sense of exclusion and marginalization for employees from diverse groups, which can negatively impact employee morale and retention.

Key measures:

- Percentage of diverse employees in leadership and management positions compared to the overall workforce (Total Number of Employees). "Diverse" here should be defined based on your organization's DE&I goals (it could include women, people of color, LGBTQ+ individuals, etc.). This information should be kept confidential and only used for the purpose of creating an equitable culture.

$$\frac{\text{\# of diverse leaders}}{\text{Total \# of employees}} \times 100$$

B. Employee retention rates

Employee retention is a key indicator of a workplace culture that is inclusive, equitable, and respectful of all employees. High employee retention rates can lead to cost savings, improved productivity, and increased innovation. Low employee retention rates can signal that the organization is not doing enough to create a welcoming and supportive environment for all employees, which can lead to recruitment and training challenges.

Key measures:

- Overall employee retention rate

$$\text{Employee Retention Rate} = \frac{\text{Total \# of employees} - \text{Total \# of employees who left}}{\text{Total \# of employees}} \times 100$$

- By the same way you can calculate the Retention rate for diverse groups (e.g., women, people of color, LGBTQ+ individuals, people with disabilities). For example, for women:

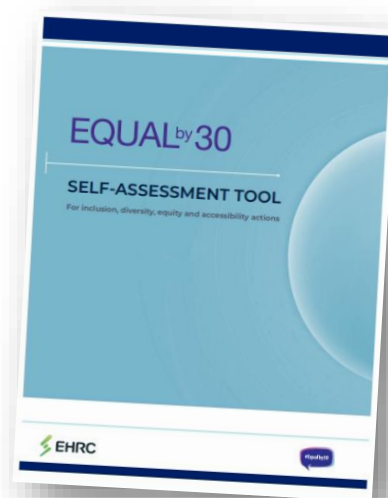
$$\text{Employee Retention Rate of women} = \frac{\text{Total \# of employees} - \text{Total \# of women employees who left}}{\text{Total \# of employees}} \times 100$$

Segment the population further:

- Retention rate for different employee levels (e.g., entry-level, mid-level, senior-level)
- Retention rate for different departments or business units
- Combine age group and gender, or compare retention rates for different generations (Gen Z vs. Millennials vs. Baby Boomers)

C Equal by 30 Self-Assessment Tool - For inclusion, diversity, equity and accessibility actions - International edition

The EQUAL by 30 Self-Assessment Tool is an exemplary resource for promoting an inclusive workplace culture, specifically designed for organizations committed to the Equal by 30 campaign (see best practice 1), but equally valuable as a toolkit for any interested organization. This self-assessment checklist serves as a crucial internal gauge, enabling organizations to evaluate their current status in achieving gender equality and inclusivity objectives. By methodically assessing various aspects of workplace practices and policies, the tool helps identify areas of strength and those needing enhancement. It's structured to guide organizations through a comprehensive evaluation process, encompassing equal pay, leadership opportunities, inclusive culture, and more, fostering a deeper understanding of the journey towards a diverse, equitable, and inclusive workplace. This process not only highlights progress made but also pinpoints goals for continuous improvement towards the 2030 targets. [READ MORE](#)



Timeline		
 Short-term	 Mid-term	 Long-term
Develop and implement DE&I training program. (1-2 months)	Review and update company policies. Roll out family-friendly policies and other assistance services. (3-6 months)	Establish DE&I committee, set in full action all action items, host events, and continuously monitor DE&I progress. (12+ months)
 Success Metrics	<p><i>The effectiveness of the plan will be evaluated based on the following criteria:</i></p> <ul style="list-style-type: none"> Employee satisfaction surveys that measure perceptions of inclusivity and belonging: Achieve a satisfaction rate of ≥80% among employees in terms of feeling valued and included in the workplace. Participation rates in DE&I training and events: Attain a participation rate of ≥70% of the total workforce in DE&I training and events annually. Number of employee-led DE&I initiatives: Launch and sustain at least 5 employee-led DE&I initiatives per year. Representation of diverse groups in leadership and management positions: Achieve a minimum of 30% representation of diverse groups in leadership and management positions within the organization. Employee retention rates: Maintain a yearly employee retention rate of ≥85% among diverse groups within the organization. 	
	 Resources	<ul style="list-style-type: none"> Dedicated budget for DE&I initiatives. Expertise in DE&I from HR professionals and external consultants. Collaboration with employee resource groups and advocacy organizations. Access to technology and platforms for training, communication, and event management.
 Challenges		 Mitigating Strategies
<ul style="list-style-type: none"> Addressing deeply ingrained biases and stereotypes. Overcoming resistance to change and apathy towards DE&I initiatives. Ensuring that DE&I initiatives are implemented consistently across the organization. 		<ul style="list-style-type: none"> Foster a culture of open communication and transparency. Provide ongoing training and support to employees. Cultivate a sense of ownership among employees for DE&I initiatives. Track and measure DE&I progress to demonstrate the impact of initiatives. Reward and recognize employees who contribute to a more inclusive workplace.







12 PROMOTE AN INCLUSIVE WORKPLACE CULTURE (INDUSTRY)



13

DEVELOP AND ESTABLISH DIVERSE RECRUITMENT STRATEGIES (INDUSTRY)

<p>Action Plan 13</p>	<p align="center">13. Develop and Establish Diverse Recruitment Strategies (Industry)</p>
<p align="center"> Description</p>	<p>This comprehensive plan focuses on implementing targeted recruitment methods to attract and engage candidates from underrepresented groups. By leveraging tailored advertising, social media outreach, partnerships with community organizations, and inclusive job descriptions, the strategy seeks to create a more equitable and diverse workplace culture. The plan also emphasizes the importance of flexible work arrangements, training for HR professionals, and mentorship programs to support diverse candidates. Continuous monitoring and evaluation of the recruitment strategies will ensure their effectiveness and alignment with the organization's diversity goals.</p>
<p align="center"> Objective</p>	<ul style="list-style-type: none"> ✓ <i>Develop recruitment strategies that are tailored to these needs and interests.</i> ✓ <i>Implement these strategies to attract and recruit more underrepresented candidates to the H2Excellence CoVEs.</i> ✓ <i>Monitor and evaluate the effectiveness of these strategies to ensure that they are meeting their objectives.</i>
<p align="center"> Target Audience</p>	<ul style="list-style-type: none"> • Companies that participate in the H2Excellence CoVE project. • Human resource (HR) professionals responsible for recruitment. • Hiring managers and supervisors.
<p align="center"> Proposed Activities/Steps</p>	<p>1. Targeted Online Advertising:</p> <ul style="list-style-type: none"> ➤ Utilize online advertising platforms that cater to specific demographics, such as ethnicity, gender, and sexual orientation. ➤ Tailor ad copy and visuals to resonate with the interests and experiences of underrepresented groups. (see Action Plan 2 “Inclusive Dissemination and Communication Strategies”) ➤ Target specific online communities and social media platforms frequented by underrepresented groups. <p>2. Social Media Outreach:</p> <ul style="list-style-type: none"> ➤ Engage with underrepresented groups on social media platforms like LinkedIn, Facebook, and Twitter. ➤ Participate in relevant online groups and forums to connect with potential candidates. Utilize social media advertising to reach a wider audience of underrepresented candidates. ➤ Incorporate analytics tools, such as Hootsuite Insights or Sprout Social, to track engagement, identify trends, and refine outreach strategies based on data-driven insights. ➤ Engage with underrepresented groups on social media platforms like LinkedIn, Facebook, and Twitter. <p>3. Partnerships with Community Organizations:</p> <ul style="list-style-type: none"> ➤ Partner with organizations that serve underrepresented groups, such as minority-serving institutions, community centers, and professional associations. ➤ Collaborate with these organizations to host job fairs, workshops, and other events that connect with underrepresented candidates.

- Encourage referrals from community organizations to expand the pool of potential candidates.

4. Inclusive and Gender-Neutral Job Descriptions:

- Avoid using gendered language or assumptions in job descriptions.
- Emphasize the skills and qualifications required for the role, rather than focusing on gender stereotypes.
- Showcase the diversity and inclusion initiatives within the organization to attract candidates who value a welcoming and supportive work environment.

5. Flexible Work Arrangements:

- Offer flexible work arrangements, such as remote work options, flexible hours, and compressed workweeks, to attract candidates with caregiving responsibilities or other commitments.
- Promote the company's commitment to work-life balance and flexibility to resonate with underrepresented groups who may prioritize these factors. (see also Action Plan 12 “Inclusive Workplace Culture”)

6. Training and Education for HR Professionals:

- Provide ongoing training and education to HR professionals on diversity and inclusion practices (e.g. Diversity and Inclusion Online Certificate Programs, Inclusive Leadership Certificate etc.)
- Equip HR professionals with the knowledge and skills to identify and recruit underrepresented candidates effectively.
- Empower HR professionals to recognize and address unconscious bias in hiring decisions.

7. Mentorship Program for Underrepresented Employees:

- Establish a mentorship program to provide support and guidance to underrepresented employees.
- Pair underrepresented employees with mentors who can share insights, provide career advice, and foster a sense of belonging.
- Encourage mentorship relationships to extend beyond formal programs and foster a culture of support and inclusion within the organization.

8. Monitor and evaluate the effectiveness of these strategies to ensure that they are meeting their objectives.

- Track the number of underrepresented candidates who are applying for and receiving job offers.
- Track the representation of underrepresented groups in the workforce.
- Track employee retention rates and promotion rates of underrepresented groups in all levels.
- Gather feedback from underrepresented candidates and employees.



**Application to
H2Excellence
Project**

- Overall Project: By developing and implementing diverse recruitment strategies, the H2Excellence CoVE project can help to create a more equitable and inclusive hydrogen sector. This approach not only enriches the talent pool but also fosters innovation, inclusivity, and sustainability within the H2Excellence project and the broader green hydrogen industry.
- Task 4.4. Training and technical support for SMEs in green hydrogen technologies

Examples - Best Practices

1. Short Guide for creating an inclusive Job Description

1. Avoid Gendered Language & Assumptions:

Use gender-neutral pronouns ("they/them") and replace gender-coded terms like "manpower" with inclusive terms like "team" or "individual."

Focus on skills, experience, and qualifications, avoiding gender stereotypes.

2. Use Action Verbs and Strong Language:

Use active verbs to describe specific actions and responsibilities.

Highlight the impact and contributions expected from the candidate.

3. Tailor Language to the Role and Industry:

Employ relevant terminology specific to the green hydrogen sector.

Avoid overly technical language that might exclude non-specialist candidates (applicable for non-specialist positions).

4. Highlight Company Culture and Values:

Emphasize your commitment to DE&I and showcase your company's innovation and collaborative culture. Mention specific DE&I initiatives or programs your organization supports.

5. Proofread for Inclusivity:

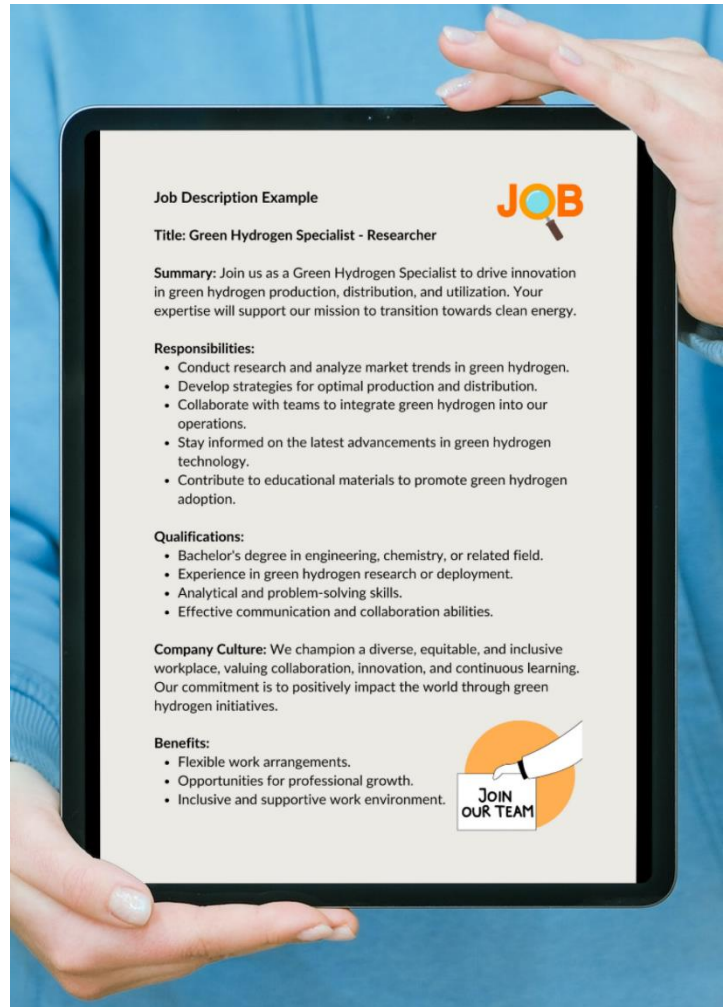
Review the job description for biases or assumptions. Get feedback from diverse individuals to ensure inclusivity.

6. Avoid Gender-Coded Words:

Steer clear of words perceived as masculine (e.g., "aggressive"). Use tools like Gender Decoder for checking.

7. List Essential Requirements:

Only include truly essential qualifications to encourage a broader range of applicants. Avoid demanding degrees from "elite" universities or



insisting on "native speakers" to ensure broader inclusivity.

8. Highlight Inclusive Benefits:

Mention benefits like shared parental leave and flexible working arrangements.

9. Use Clear and Accessible Language:

Avoid jargon and complex language. Tools like Grammarly can help assess readability.

10. Affirm Commitment to Diversity in the Ad:

Explicitly state your value on diversity and inclusion, providing examples of how these values are enacted.

2. Use DE&I Metrics throughout the recruitment process

A. Candidate Demographics

Collect and analyze candidate demographic data throughout the recruitment process. This involves gathering information about the demographic background of candidates, such as gender, race, ethnicity, age, disability status, etc., usually done anonymously to respect privacy. Keeping and analyzing candidates demographic is very important for your recruitment strategy as it helps you understand whether your efforts are reaching a diverse pool of candidates. By examining the sources of candidates (like job boards, social media, referral programs), organizations can also determine which channels are most effective in attracting diverse candidates. It also helps evaluate whether the language and imagery used in job postings are inclusive and appealing to diverse candidates.

Method

The demographic data (gender, race, ethnicity, age, disability status, etc.) is analyzed at each stage of the recruitment funnel – from application to interview, and final selection. By comparing the percentage of each demographic group at every stage, it reveals if certain groups are underrepresented. By this way organizations can assess how diverse talent progresses or not through the recruitment process.

Actions to attract a more diverse candidate pool.

- **Refining Job Postings:** If certain groups are underrepresented, revising job postings to use more inclusive language and imagery can help attract a wider range of candidates. (see Guide for creating an inclusive Job Description at previous example)
- **Diversifying Sourcing Channels:** If the data shows that certain sourcing channels yield less diverse candidates, expanding to or prioritizing different channels can be effective. This might include *targeting specific job boards, community groups, or professional networks*.
- **Continuous Improvement:** Regularly updating and refining recruitment practices based on these insights ensures ongoing improvement in attracting diverse talent.
- **Feedback and Engagement:** Engaging with candidates and seeking feedback can provide additional insights into how the organization is perceived by diverse talent pools and what changes might make the organization more attractive to them.

Example:

A company developing green hydrogen technologies is analyzing the demographic data of candidates applying for “Regulatory Expert”. While analyzing candidate demographics they notice that the applicant pool is predominantly male, with a very low representation of women. Upon further investigation, they discover that their job postings are primarily focused on technical expertise in traditional hydrogen production methods, asking a number of technical qualifications as well as no gaps in their career. This may be discouraging women from applying who may have expertise mainly in policy issues as well as career gaps due to maternity leaves.

To address this issue, the company revises their job postings to emphasize the company's commitment to diversity and inclusion in the green hydrogen field. They also highlight the possibilities for flexible work arrangements for parents. They highlight the opportunities for women and other applicants from underrepresented groups to apply their skills and expertise to a sector that they might not have extended previous experience but are willing to learn and develop. They also include in the qualifications descriptions competences such as communication skills, as well as critical-thinking and analytical skill that are needed to write reports and explain policies. They also expand their sourcing channels to include women's professional networks, and online platforms that cater to women in STEM careers.

As a result of these changes, the company begins to see a more diverse applicant pool for Regulatory Expert roles. They also receive positive feedback from women candidates who appreciate the company's efforts to create an inclusive workplace where women are valued and supported.

B. Conduct Adverse Impact Analysis (AIA)

Adverse impact analysis (AIA) is a statistical method used to identify and assess whether there are statistically significant differences in the selection rates of different demographic groups (such as gender, race, or ethnicity) at various stages of the recruitment process. AIA helps organizations uncover if any stage of the hiring process disproportionately filters out candidates from specific demographic groups. This can be caused by unconscious biases, implicit assumptions, or outdated hiring practices that may not accurately reflect the skills and qualifications of applicants from diverse backgrounds. Besides ethical considerations, it's also a legal requirement in many countries to avoid discriminatory practices in employment.

Method:

AIA requires collecting and analyzing data on applicants and hires, broken down by different demographic categories. This data should include information on the applicant pool, hiring outcomes, and the specific selection criteria or methods used at each stage of the recruitment process.

AIA typically employs the Four-Fifths Rule (or 80%), a widely used benchmark for assessing potential adverse impact. Under the Four-Fifths Rule, if the selection rate for any demographic group is less than 80% (or four-fifths) of the rate for the most selected group, it indicates a potential adverse impact.

Here is an example of an AIA analysis:

Demographic Group	Applicants	Hires	Selection Rate or % Hired
Men	40	24	24/40 or 60%
Women	20	6	6/12 or 30%

Because the women rate is 30/60 or one-half (50%) of the Men Rate is less than four-fifths (80%), we indicate a potential adverse impact.

Actions to mitigate adverse impact:

If AIA reveals adverse impact, organizations should take corrective actions to eliminate or reduce it. This may involve:

- **Review and modify recruitment practices.** Organizations should carefully review all aspects of their recruitment process, including job descriptions, selection criteria, interview questions, testing methods, and hiring panels. This process may identify elements that inadvertently disadvantage certain demographic groups, and modifications can be made to ensure fairness and inclusivity.
- **Provide bias training and awareness.** Providing training on unconscious bias to recruiters and hiring managers can help raise awareness of these biases and equip them with strategies to mitigate their influence.
- **Explore alternative recruitment practices.** Organizations can explore alternative recruitment methods that are more inclusive and fairer to all demographic groups. This might include implementing structured interviews, diverse hiring panels, or blind recruitment processes where identifying information is removed from applications.

Example:

A research institution conducting AIA for their green hydrogen research program discovers that the selection rate for female scientists is significantly lower than the rate for male scientists at the initial review stage of grant proposals. This indicates potential adverse impact, and the institution further investigates the specific selection criteria and reviewer panels used for this stage. The investigation reveals that the criteria place a strong emphasis on experience in traditional hydrogen research areas, such as electrolysis and fuel cell technology, which are domains where male scientists tend to have more experience. The institution decides to revise the criteria to place greater emphasis on innovative approaches to hydrogen research, which could open up opportunities for female scientists with expertise in emerging fields such as materials science and nanotechnology. Additionally, the institution expands the diversity of its reviewer panels to include more female scientists and experts from underrepresented backgrounds.

Timeline		
 Short-term	 Mid-term	 Long-term
Conduct research and develop recruitment strategies (3 months)	Implement recruitment strategies across the organization (6 months)	Monitor and evaluate the effectiveness of strategies (ongoing)
 Success Metrics	<p><i>The effectiveness of the plan will be evaluated based on the following criteria:</i></p> <ul style="list-style-type: none"> • Number of candidates from underrepresented groups who apply for jobs: Receive job applications from at least XX underrepresented candidates annually. • Number of candidates from underrepresented groups who receive job offers: Extend job offers to a minimum of XX underrepresented candidates per year. • Number of candidates from underrepresented groups who are hired: Successfully hire at least XX underrepresented candidates annually. • Diversity Hiring Rate: Measure the percentage of new hires from underrepresented groups compared to total hires: Achieve a diversity hiring rate of ≥25% of total hires being from underrepresented groups. • Feedback from underrepresented candidates and employees: Attain an average positive feedback rating of ≥80% from underrepresented candidates and employees. 	
 Resources	<ul style="list-style-type: none"> • Funding for recruitment and capacity building training programs • Partnership with community organizations • Staff time for developing and implementing the plan • Funding for applicant Tracking Systems (ATS) such as BambooHR, Greenhouse, or Lever, which offer features like diversity recruiting analytics and reporting. 	
 Challenges		 Mitigating Strategies
<ul style="list-style-type: none"> • Changing attitudes and behaviors about diversity and inclusion. • Breaking down unconscious bias in hiring decisions. • Overcoming systemic barriers that prevent underrepresented groups from accessing opportunities. 		<ul style="list-style-type: none"> • Provide capacity building training and education to HR professionals and hiring managers on diversity and inclusion. • Develop policies and procedures that promote diversity and inclusion. • Create a culture of accountability and transparency around diversity and inclusion metrics. • Continuous education and awareness programs on diversity for all.







13

DEVELOP AND ESTABLISH DIVERSE RECRUITMENT STRATEGIES (INDUSTRY)



14 ADOPT A SUPPLIER DIVERSITY POLICY (INDUSTRY)

<p>Action Plan 14</p>	<p>14. Adopt a Supplier Diversity Policy (Industry)</p>
<p> Description</p>	<p>According to the <i>Handbook on Supplier Diversity in Europe</i>* “supplier diversity is about the inclusion of small and medium enterprises more than 50 per cent owned and managed by people from under-represented groups, including, but not limited, to people from immigrant background or belonging to an ethnic minority group, people with disability, women or lesbians, bisexuals, gays, or transgendered (LGBT) people in the supply chain of large companies and public sector organisations”. The purpose of this policy is to promote economic development, social equity, and environmental sustainability in the supply chain.</p> <p><i>*Supplier Diversity Europe, CRÈME, Migration Policy Group, 2009</i></p>
<p> Objectives</p>	<ul style="list-style-type: none"> ✓ <i>Increase the percentage of spending with underrepresented suppliers.</i> ✓ <i>Onboard new diverse SMEs suppliers.</i> ✓ <i>Develop and implement programs to attract, engage, and develop underrepresented suppliers.</i> ✓ <i>Provide training and support to help diverse suppliers meet the requirements of the supply chain.</i> ✓ <i>Measure the progress of the Supplier Diversity Policy.</i> ✓ <i>Promote the Supplier Diversity Policy internally and externally.</i>
<p> Target Audience</p>	<ul style="list-style-type: none"> • Organizations involved in the green hydrogen value chain, including hydrogen producers, electrolyzer manufacturers, fuel cell manufacturers, and (renewable) energy suppliers. • Suppliers related to VET and Higher Education (e.g. Laboratory equipment manufacturers, Training materials and software developers, catering services etc.) • Procurement managers and employees who interact with suppliers.
<p> Proposed Activities/Steps</p>	<ol style="list-style-type: none"> 1. Define the purpose and objectives of the Supplier Diversity Policy: <ul style="list-style-type: none"> ➤ Clearly articulate the reasons behind implementing a Supplier Diversity Policy. ➤ Identify specific objectives that the policy aims to achieve, such as increasing the participation of underrepresented groups in the supply chain, improving the overall quality of suppliers, and promoting economic development in underserved communities. 2. Determine which diversity categories to include: <ul style="list-style-type: none"> ➤ Identify the specific groups of suppliers that the policy will target, such as small and medium-sized enterprises (SMEs), women-owned businesses (WBOs), minority-owned businesses (MBEs), and socially disadvantaged businesses (SDBs). ➤ Consider the legal requirements of the European Union, which may mandate the inclusion of certain groups of suppliers. 3. Establish a clear definition of diversity: <ul style="list-style-type: none"> ➤ Define the criteria for determining whether a supplier is considered to be part of a diversity category, such as ownership, management, or the location of the business. ➤ Consider using third-party certifications to verify the diversity status of suppliers.

4. Develop measurable goals and targets:

- Set quantifiable goals for the Supplier Diversity Policy, such as increasing the percentage of spending with underrepresented suppliers or the number of new diverse suppliers that are onboarded.
- Establish targets for each diversity category to ensure that the policy is inclusive and equitable.

5. Design and implement programs to achieve the goals:

- Develop strategies and initiatives to attract, engage, and develop underrepresented suppliers.
- Create opportunities for diverse suppliers to participate in procurement processes and showcase their capabilities.
- Provide training and support to help diverse suppliers meet the requirements of the supply chain.

6. Establish a framework for measurement and reporting:

- Develop a system for tracking progress towards the goals of the Supplier Diversity Policy.
- Regularly monitor and report on the performance of the policy, identifying areas for improvement and opportunities for further engagement with diverse suppliers.

7. Promote the Supplier Diversity Policy internally and externally:

- Communicate the policy's goals and objectives to all employees and stakeholders.
- Showcase the achievements of the policy through case studies and testimonials.
- Engage with external organizations and partner with industry groups to promote supplier diversity.

8. Review and update the Supplier Diversity Policy regularly:

- Assess the effectiveness of the policy and make adjustments as needed.
- Adapt the policy to reflect changes in the market, legislation, and the needs of diverse suppliers.

9. Establish a governance structure for the Supplier Diversity Program:

- Create a dedicated team or committee responsible for overseeing the implementation and management of the policy.
- Define clear roles and responsibilities for all stakeholders involved in the program.
- Regularly review the governance structure and make changes as needed.

10. Measure the impact of the Supplier Diversity Policy:

- Evaluate the economic, social, and environmental impact of the policy.
- Track the progress of diverse suppliers and identify areas for further support.
- Communicate the impact of the policy to stakeholders and the public.



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- Industries participating in national CoVES would benefit from a Supplier Diversity Policy by ensuring a broad representation of suppliers. This approach can help diversify their supply chain, bringing in unique perspectives and innovative solutions specific to their industry.

Examples - Best Practices

1. Considerations on Supplier Diversity Policies in Europe

The status of inclusive supply policies in Europe is still developing. While there are a number of organizations working to promote supplier diversity (mainly large scale organizations with headquarters in USA where inclusion supplier policies are mainstreamed and well developed), there is no single, unified approach. As a result, the definitions of "diverse supplier" can vary from country to country and even from company to company. In addition, there is a lack of data on the number and characteristics of diverse suppliers in Europe (in contrast to USA that there's a certification process for diverse suppliers). Another challenge is the legal framework in Europe. For example, the EU's General Data Protection Regulation (GDPR) restricts the collection and use of sensitive personal data, such as data about an individual's race, ethnicity, or sexual orientation.

Despite these challenges, there are a number of organizations working to promote supplier diversity in Europe. These organizations include:

- Minority Supplier Development UK (MSDUK)
- WeConnect International
- National Gay and Lesbian Chamber of Commerce (NGLCC - international branch)

These organizations provide a range of services to companies that want to implement inclusive supply policies, such as training, mentoring, and data on diverse suppliers.

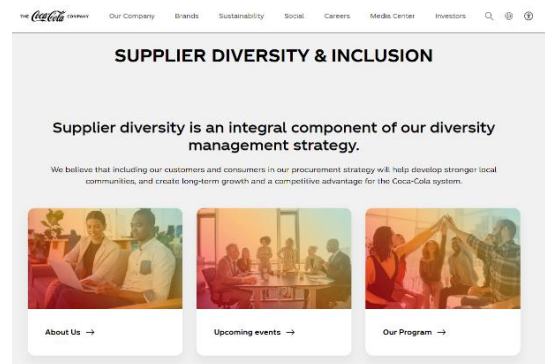
The EU is also taking steps to promote supplier diversity. In January 2023, entered to force the *Corporate Sustainability Reporting Directive (CSRD)*, which will require large companies to report on social and environmental information by 2025. Overall, the status of inclusive supply policies in Europe is still developing, but there is a growing movement to promote supplier diversity. Companies that want to implement inclusive supply policies should start by understanding the legal and regulatory framework in their country and then work with organizations that can provide support and guidance.

2. Supplier Diversity Policy examples from USA:

a. "The Coca Cola company" Supplier & Inclusion strategy

The company is committed to spending annually 1 billion dollars with diversity suppliers aiming to help develop stronger local communities, and create long-term growth and a competitive advantage for the company's system. [Read more](#)

- [Supplier Diversity Policy statement](#)



b. "XEROX" Supplier Diversity Program

Xerox mission in supplier diversity is to take proactive steps in identifying, fostering relationships with, and procuring goods and services from certified small businesses, as well as enterprises owned by minorities, women, veterans, members of the LGBTQ+ community, and individuals with disabilities. [Read more](#)

c. "FLUOR" Supplier Diversity Statement [Read here](#)

Timeline	
Short-term	Mid-term
<p>Develop and implement a comprehensive supplier diversity policy, establish a governance structure, and create a database of diverse suppliers. (1 year)</p>	<p>Onboard new diverse suppliers, develop and implement supplier development programs, and provide training and support to diverse suppliers. (2-4 years)</p>
	<p>Achieve consistent growth in the percentage of spending with underrepresented suppliers, demonstrate a positive impact on the economic, social, and environmental performance of the company, and establish a reputation as a leader in supplier diversity. (5+ years)</p>
<p>Success Metrics</p>	<p><i>The effectiveness of the plan will be evaluated based on the following criteria:</i></p> <ul style="list-style-type: none"> Percentage of spending with underrepresented suppliers: Allocate at least 15% of total procurement spending to underrepresented suppliers. Number of new diverse suppliers onboarded: Onboard a minimum of 20 new diverse suppliers annually. Average revenue generated from diverse suppliers: Achieve an average annual revenue of €XX from contracts with diverse suppliers. Number of diverse suppliers participating in supplier development programs: Include at least 30 diverse suppliers in supplier development programs each year. Percentage of diverse suppliers that meet or exceed performance expectations: Ensure that ≥80% of diverse suppliers meet or exceed set performance benchmarks. Level of employee satisfaction with the Supplier Diversity Program: Attain a ≥85% satisfaction rate among employees regarding the effectiveness and impact of the Supplier Diversity Program.
<p>Resources</p>	<ul style="list-style-type: none"> Financial resources: <i>Funding for training, development, and support programs for diverse suppliers.</i> Human resources: <i>Dedicated team or committee responsible for overseeing the implementation and management of the Supplier Diversity Program.</i> Partnerships: <i>Collaboration with external organizations and industry groups to promote supplier diversity.</i>
<p>Challenges</p>	<p>Mitigating Strategies</p>
<ul style="list-style-type: none"> Lack of awareness of supplier diversity among procurement managers and employees. Difficulty in identifying and engaging diverse suppliers. Limited support for diverse suppliers to meet the requirements of the supply chain. Resistance to change among some stakeholders. 	<ul style="list-style-type: none"> Provide comprehensive training on supplier diversity for all procurement professionals and employees who interact with suppliers. Create a database of diverse suppliers and actively seek out new suppliers. Develop and implement supplier development programs to provide training, support, and mentoring to diverse suppliers. Foster open communication and collaboration among stakeholders to address concerns and build consensus.




14

**DEVELOP AND ESTABLISH
DIVERSE RECRUITMENT STRATEGIES
(INDUSTRY)**



15 ESTABLISH COLLABORATIVE NETWORKS WITH WOMEN ORGANIZATIONS THAT SUPPORT AND ADVOCATE FOR WOMEN IN THE GREEN HYDROGEN SECTOR (ALL)

<p>Action Plan 15</p>	<p>15. Establish Collaborative Networks with Women Organizations that support and advocate for women in the Green Hydrogen Sector (All)</p>
<p> Description</p>	<p>Build networks with diverse institutions, organizations, and initiatives that promote women's participation in the energy and hydrogen sector to foster research collaboration and exchange best practices. By establishing collaborative networks with women's organizations, the H2Excellence CoVEs can leverage their expertise, networks, and resources to promote diversity, gender equality, and social inclusion in the hydrogen sector. This will contribute to the development of a more inclusive and sustainable hydrogen economy.</p>
<p> Objective</p>	<p>✓ <i>To establish strong and meaningful partnerships with women's organizations, institutions, and initiatives that support and advocate for women in the hydrogen sector to promote knowledge sharing, exchange of best practices, and collaboration on research initiatives.</i></p>
<p> Target Audience</p>	<ul style="list-style-type: none"> • Women's organizations, institutions, and initiatives that support and advocate for women in the hydrogen sector. • Researchers, educators, and professionals working in the hydrogen sector. • Policymakers, industry leaders, and decision-makers who influence the development and implementation of hydrogen technologies.
<p> Proposed Activities/Steps</p>	<ol style="list-style-type: none"> 1. Identify and map a network of relevant women's organizations, institutions, associations and initiatives: <ul style="list-style-type: none"> ➤ Conduct a comprehensive search for organizations, institutions, and initiatives that support and advocate for women in the hydrogen sector. ➤ Identify organizations with a proven track record in promoting women's participation in the energy and hydrogen sector. ➤ Map the network to identify potential collaboration opportunities and areas of expertise. 2. Establish formal partnerships with key organizations: <ul style="list-style-type: none"> ➤ Reach out to identified organizations to discuss potential partnerships. ➤ Negotiate and finalize associate partnership agreements that outline the roles and responsibilities of both parties. ➤ Develop action plans and timelines for collaboration activities. 4. Organize regular meetings and workshops to facilitate knowledge sharing and exchange of best practices: <ul style="list-style-type: none"> ➤ Host virtual or in-person meetings and workshops to bring together representatives from partner organizations. ➤ Facilitate discussions on research findings, innovative practices, and challenges faced by women in the hydrogen sector. ➤ Encourage the development of joint research projects and collaborative initiatives. 11. Promote the H2Excellence project and its CoVE activities to partner organizations: <ul style="list-style-type: none"> ➤ Share information about the H2Excellence project with partner organizations. ➤ Invite partner organizations to participate in project activities and events.

	<ul style="list-style-type: none"> ➤ Collaborate with partner organizations to promote the project's goals and objectives.
 <p>Application to H2Excellence Project</p>	<ul style="list-style-type: none"> • WP3 (Teaching Training and Learning Activities): Collaborations with women's organizations can enhance the development of training programs (Task 3.2-3.4) by integrating diverse perspectives and addressing gender equality in the hydrogen sector. Moreover: • Task 3.6: "Train the Trainer" program might benefit from the insights and expertise of women's organizations, promoting gender-sensitive training and educational content. • Task 3.8: Involvement of women's organizations in providing feedback and assessment for courses and training could be beneficial for enhancing the inclusivity and effectiveness of the training programs. • Task 4.6. Design and deploying transnational training, collaboration and networking events between CoVEs, VET providers, businesses, and scientific community • Overall project: Enables the exchange of best practices and innovative ideas, potentially leading to more effective and inclusive hydrogen sector solutions. Fosters research collaboration, which can lead to advancements in hydrogen technology with a focus on gender-sensitive approaches. Strengthens the project's network and outreach, making it more.

Examples - Best Practices

1. Women's Organizations and Associations on Green Hydrogen



Women in Green Hydrogen: A global network of women working in the hydrogen sector, promoting the role of women in the industry, advocating for gender equality, and fostering a more inclusive and equitable green hydrogen workforce. The network provides a platform for women to connect, share experiences, and learn from each other, as well as to raise awareness about the opportunities in green hydrogen and encourage more women to pursue careers in the field. They organise networking events and panels about relevant topics in green hydrogen, manage an international expert database, and offer a mentorship programme. [Website](#)



H2-DEIA platform: An online platform that connects diverse individuals from all backgrounds with opportunities in the hydrogen sector. The platform provides resources, events, and career opportunities to support underrepresented groups in accessing the green hydrogen

workforce. It also works to promote diversity and inclusion across the entire hydrogen value chain. [Website](#)

2. Other relevant Women’s Organizations



Women’s Energy Network (WEN) is a global organization of women professionals working across the energy value chain. They provide networking opportunities, educational events, and leadership development programs to help women advance their careers in the energy industry. WEN was founded in 1994 and has a membership of over 7,000 professionals from around the world offering them educational, networking, and leadership opportunities through networking events, conferences, community initiatives, social outings, and mentoring programs. [Website](#)



Women in Renewable Energy (WiRE) - Canada

WiRE is a network of women working in the renewable energy sector. They provide networking opportunities, educational programs, and awards to recognize women's achievements in the field. WiRE is inclusive of all renewable energy technologies and has chapters in Canada, Turkey, Georgia, Azerbaijan, Jordan, the UAE, and the G7 countries. [Website](#)

WePOWER Network - South Asia

WePOWER is a network of women professionals working in the energy and power sector in South Asia. They aim to increase the representation of women in the industry, promote gender equality, and foster a more inclusive and equitable workforce. WePOWER has five key pillars of engagement: STEM education, recruitment, professional development, retention, and policy and institutional change. [Website](#)



C3E Women in Clean Energy - USA

The C3E Women in Clean Energy initiative is led by the U.S. Department of Energy and partners with MIT, Stanford, and Texas A&M. They provide networking opportunities, educational resources, and leadership development programs to help women advance their careers in the clean energy sector. One of their key initiatives is the "C3E Ambassadors" program, which brings together 40 distinguished senior professionals to advocate for and support women in the clean energy industry. [Website](#)

Women of Renewable Industries and Sustainable Energy (WRISE) - USA

WRISE is an organization that works to recruit, retain, advance, and inspire women in the renewable energy economy. They focus on systemically excluded communities and provide support and resources to help women succeed in the field. WRISE has a strong focus on community building, education, and leadership development. [Website](#)



Timeline		
 Short-term	 Mid-term	 Long-term
Identify and map network of relevant organizations (3 months)	Establish formal partnerships with key organizations (6 months)	Organize regular meetings and workshops, promote project to partners (ongoing)
 Success Metrics	<p><i>The effectiveness of the plan will be evaluated based on the following criteria:</i></p> <ul style="list-style-type: none"> • The number of partnerships established with women's organizations: > 1 per year • The number of knowledge-sharing events and workshops organized: 1 per CoVE country/year • The number of joint research projects and collaborative initiatives undertaken: > 4 by the end of the project • The feedback received from partner organizations and participants: 80% satisfaction 	
 Resources	<ul style="list-style-type: none"> • Staff time for developing and implementing the plan • Funding for outreach events and workshops • Partnership with women's organizations and other groups 	
 Challenges	 Mitigating Strategies	
<ul style="list-style-type: none"> • Identifying and connecting with relevant women's organizations in the hydrogen sector. • Securing funding for outreach events and workshops. • Managing and maintaining relationships with (external) partner organizations. 	<ul style="list-style-type: none"> • Conduct thorough research to identify relevant organizations. • Develop partnerships with organizations that have a track record of success. • Prioritize fundraising efforts to support outreach activities. • Develop a communication plan to maintain regular contact with partners. 	



15

ESTABLISH COLLABORATIVE NETWORKS WITH WOMEN ORGANIZATIONS THAT SUPPORT AND ADVOCATE FOR WOMEN IN THE GREEN HYDROGEN SECTOR (ALL)



Erasmus+

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4.5 Creating an inclusion Plan

Creating an Inclusion Plan is more than just a strategic process; it's a commitment to fostering a culture of Diversity, Equity, and Inclusion (DE&I) within your organization. This plan is a critical step towards nurturing a workplace that not only values diversity but thrives on it. In this final section, we outline key components and steps to develop an effective and seamless Inclusion Plan, making it easy for you to bring this vital initiative into your organization.

A. Understanding what is an Inclusion Plan

- **Definition:** This Plan (or Policy) is your organization's formal commitment to diversity and inclusivity in the workplace. It's the foundation of your DE&I strategy.
- **Importance:** It's essential as it not only reflects your organizational ethics but also directly contributes to building a creative, diligent, and productive workforce by addressing workplace discrimination.

B. Involvement in Crafting the Plan

- **Leadership Team:** The CEO, directors, and managers play a pivotal role in endorsing and implementing the policy.
- **Board of Directors:** They ensure alignment of the policy with the organization's broader objectives.
- **Diverse Committee:** Members from different backgrounds offer a spectrum of perspectives.
- **DE&I Consultant:** An expert can provide invaluable guidance and insights.

C. Key Components of the Inclusion Strategy

Component 1. Definition of Diversity and Equality:

Engage your staff through workshops and surveys to contextualize diversity and equality within your organization.

Component 2. Setting Measurable DE&I Goals:

Formulate specific objectives, such as increasing underrepresented groups' representation or enhancing employee satisfaction.

Component 3. Implementation Plans:

Detail actionable steps to achieve these goals, drawing from the 15 Action Plans previously outlined. Consider strategies like diverse recruitment, bias training, inclusive policies, and regular progress monitoring.

D. Steps to Develop an Inclusion Plan

STEP 1 Assessment

Evaluate your company's current DE&I status, identifying gaps and improvement areas. Conduct an internal survey to understand current DE&I perceptions and experiences among employees. Use anonymous surveys to gauge employee awareness of DE&I issues, their experiences of inclusivity in the workplace, and suggestions for improvement.

STEP 2 Goal Setting

Establish realistic, measurable DE&I goals aligned with your company's mission. Define clear, specific DE&I objectives based on the assessment findings. For example, set a goal to increase gender diversity in leadership positions by 30% over the next three years.

STEP 3 Strategy Development

Craft specific, actionable strategies for each goal, involving various departments for comprehensive input. Formulate detailed action plans for each DE&I goal. E.g. for the gender diversity goal, implement mentorship programs and targeted recruitment initiatives.

STEP 4 Implementation

Allocate necessary resources and communicate the plan across the organization. Allocate resources and assign responsibilities for executing the strategies. E.g. Designate a DE&I officer and establish a budget for training programs and recruitment activities.

STEP 5 Training & Education

Conduct ongoing DE&I training and foster open dialogues. Organize comprehensive training sessions on DE&I topics for all staff levels. For example, conduct workshops on unconscious bias, cultural competency, and inclusive communication.

STEP 6 Monitoring & Evaluation

Implement regular tracking and feedback mechanisms. Set up metrics and regular review intervals to assess the effectiveness of DE&I initiatives. For example, monitor changes in staff diversity demographics, employee satisfaction scores, and participation rates in DE&I programs.

STEP 7
Review and
Adaptation

Continuously review and adjust the plan based on feedback and changing dynamics. Annually/Biannually review the plan, incorporating employee feedback and adapting strategies to address emerging DE&I challenges or opportunities.

Developing an Inclusion Plan is a dynamic process that requires commitment, continuous learning, and adaptation. It is not just about fulfilling a legal or moral obligation but about building a stronger, more innovative, and more resilient company. With a well-crafted Inclusion Plan, companies can harness the full potential of their diverse workforce and create a positive, inclusive working environment. As we turn to the next page, we provide a comprehensive template that can be adapted and utilized to suit the specific needs and context of your organization. This template is designed as a practical tool to help you translate the principles outlined in this guide into actionable strategies and initiatives. It is important to approach it not just as a document to be filled out, but as a living, evolving blueprint that will grow and change along with your organization's DE&I journey.

Embrace this template as a starting point and remember that the journey towards true diversity, equity, and inclusion is ongoing and dynamic. It requires commitment, adaptability, and continuous engagement from all levels of your organization. The next page is not just a template; it's the first step towards building a more inclusive and equitable workplace!

4.6. Hydrogen Industry Inclusion Plan Template

[Company Name] Inclusion Plan

Last Update: date

Introduction

As a leading entity in the Green Hydrogen industry, [Company Name] recognizes the significance of fostering an inclusive and diverse workforce. Our commitment to diversity, equity, and inclusion (DE&I) is not only a moral imperative but also a strategic enabler of innovation and growth in the Hydrogen sector. This Inclusion Plan outlines our approach to creating an equitable workplace where every individual, regardless of their background, has the opportunity to contribute and thrive.

Vision Statement

To establish [Company Name] as a pioneer in the Green Hydrogen industry, renowned for its inclusive culture, where diversity is our strength and every employee, including women and vulnerable groups, is empowered to reach their full potential.

Key Objectives

1. **Promote Gender Equality:** Ensure balanced gender representation at all levels, particularly in technical and leadership roles.
2. **Empower Vulnerable Groups:** Create opportunities for underrepresented and vulnerable groups, ensuring their voices are heard and valued.
3. **Foster an Inclusive Culture:** Develop a workplace environment that respects and celebrates differences and encourages open dialogue.

Strategic Initiatives

1. **Recruitment and Career Development:**
 - Implement unbiased recruitment processes with a focus on increasing the representation of women and minority groups in our workforce.
 - Develop mentorship and leadership programs specifically designed to nurture talent from diverse backgrounds.
 - Offer scholarships and internships to candidates from underrepresented groups, focusing on STEM education and renewable energy fields.

2. Workplace Policies and Environment:

- Establish flexible working arrangements to support work-life balance, benefiting employees with caregiving responsibilities.
- Conduct regular training on DE&I, unconscious bias, and cultural competency for all employees.
- Encourage the creation of Employee Resource Groups (ERGs) to support diversity and provide platforms for sharing experiences and insights.

3. Partnerships and Community Engagement:

- Collaborate with educational institutions and NGOs to promote STEM education, particularly among women and underprivileged communities.
- Engage in community outreach programs to raise awareness about the hydrogen industry and its career opportunities.
- Sponsor and participate in industry events that emphasize diversity and inclusion in the energy sector.

4. Measurement and Accountability:

- Regularly track and report on DE&I metrics, including workforce composition, pay equity, and promotion rates across different demographics.
- Incorporate DE&I goals into corporate performance metrics and leadership accountability.
- Conduct an annual review of the inclusion plan to assess progress and identify areas for improvement.

5. Policy Advocacy and Industry Leadership:

- Advocate for policies that support diversity and inclusion within the hydrogen industry.
- Share best practices and learnings with industry peers to promote DE&I across the sector.
- Recognize and celebrate DE&I achievements internally and within the wider industry.

Implementation Timeline

- **Short-term (0-12 months):** Focus on immediate actions such as policy revision, DE&I training, and establishment of ERGs.
- **Medium-term (1-3 years):** Expand recruitment and development programs, enhance community engagement, and establish partnerships.
- **Long-term (3+ years):** Aim for industry leadership in DE&I, continuous improvement in policies, and sustainable impact in the community.

At [Company Name], we believe that an inclusive and diverse workforce is the cornerstone of a successful and innovative hydrogen industry. Through this Inclusion Plan, we commit to taking concrete steps towards creating an equitable workplace where every individual has the opportunity to excel and contribute to our collective success in the renewable energy landscape.

For more information on [Company Name] inclusion plan, please email: [contact email]

5. Conclusion: Main Findings and Recommendations

This report represents a significant endeavor to advance Diversity, Equity, and Inclusion (DE&I) within the hydrogen sector, synthesizing extensive research, stakeholder insights, and strategic initiatives into a comprehensive framework. It aims to cultivate an inclusive and equitable environment, addressing the unique challenges and opportunities presented by this rapidly evolving field.

The investigation into the current state of DE&I within the hydrogen sector revealed a pronounced underrepresentation of diverse groups, notably women, highlighting a critical need for focused DE&I initiatives. This underrepresentation is a reflection of broader trends observed across the energy sector and STEM fields, underscoring systemic challenges that must be addressed. The report also identified various cultural, societal, and systemic barriers that hinder the participation of underrepresented groups. These barriers range from prevailing stereotypes and educational disparities in STEM fields to challenges in achieving a work-life balance, all of which contribute to the exclusion of diverse talents and perspectives.

Further, the report has distilled valuable lessons from a range of industries, providing a rich tapestry of DE&I best practices and insights. These insights have shaped a set of actionable DE&I strategies, tailored to meet the unique needs of the hydrogen sector. Among the key strategies identified are the adoption of flexible work arrangements, inclusive recruitment practices, and targeted outreach and awareness. The comprehensive guidelines outlined in 15 detailed Action Plans offer clear and specific strategies for organizations within the hydrogen value chain to enhance their DE&I efforts. These plans serve as a roadmap, guiding organizations towards creating an environment that not only welcomes but also thrives on diversity and inclusion.

To fully realize the potential of these DE&I initiatives, the report provides several key recommendations. These include prioritizing comprehensive DE&I training and awareness across all organizational levels, developing targeted recruitment and retention strategies to enhance the representation of underrepresented groups, and supporting women and minorities in STEM through collaborative efforts with educational institutions. Additionally, the implementation of flexible work arrangements and equal pay policies is crucial to support work-life balance and ensure equitable opportunities. Regular monitoring and evaluation, inclusive project design, and community engagement are also vital to ensure that DE&I efforts are effective and far-reaching. Lastly, organizations are encouraged to adopt best practices and continuously adapt their strategies to the evolving context of the hydrogen sector.

The H2Excellence project sets a new benchmark not only for CoVE environments but also for the broader hydrogen value chain. It highlights that DE&I should be viewed as an evolving framework, integral to the sector's growth and not merely as a set of recommendations. Embracing these principles and adapting to new challenges and opportunities is crucial for fostering a more equitable, innovative, and sustainable future. The journey towards a truly inclusive hydrogen sector is ongoing and necessitates a collaborative effort among industry leaders, policymakers, educational institutions, and community groups. This report is a vital step in that journey, equipping stakeholders with the necessary tools and insights to embed diversity, equity, and inclusion as fundamental pillars in the growth and development of the hydrogen sector. Looking forward, it is essential to maintain an active engagement with DE&I issues, exploring new areas and continuously evolving strategies to meet the dynamic needs of this vital sector.

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Equality in Energy Transitions Initiative <https://www.equality-energytransitions.org/>

IEA Gender and Energy Data Explorer: <https://www.iea.org/data-and-statistics/data-tools/gender-and-energy-data-explorer?Topic=Employment&Indicator=Gender+wage+gap+conditional+on+skills>

ILO International Labour Organization <https://www.ilo.org/>

IRENA Publications <https://www.irena.org/publications>

The World Economic Forum (weforum.org) www.weforum.org

Pictures:

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Annexes

H2Excellence Gender Inclusion Survey Questionnaire



Welcome!

This survey seeks to gather vital data such as best practices, past projects experience or other pertinent information from **partners of the H2EXCELLENCE project as well as Organizations active in the field of Green Hydrogen**. The aim is to aid in crafting guidelines for project implementation, centered around **diversity, gender equality, and social inclusion**. Ultimate goal is to ensure the active presence of women and other underrepresented groups during and after the project lifecycle through the development of a *“H2Excellence Inclusion Package”*.

We kindly ask you to dedicate some time to thoroughly complete all questions in this template. It's important to provide **tangible examples and include relevant links** wherever possible. It is advisable that this survey be completed by an **HR manager** or an individual in a **managerial or leadership position** who is well-versed in the hiring processes, policies, as well as diversity and inclusion initiatives within your organization.

Privacy & Anonymity

Your privacy is of utmost importance to us. The information provided in this survey will be kept confidential and analyzed in aggregate. Organizations will be referenced anonymously as 'Organization 1,' 'Organization 2,' etc., in any resulting reports or publications. Individual responses will not be disclosed to any third parties and will be used solely for the purpose of research and analysis in line with the objectives of the H2Excellence Project.

By proceeding with this survey, you consent to the use of your responses for the purposes described.

Thank you for your participation!

General Information

Organization Name:	
Organization type:	<ol style="list-style-type: none"> 1. University 2. R&D Organization 3. VET provider 4. Industry
Is Hydrogen the core activity of your organization?	YES/NO
Country:	
Number of Employees:	
Number of Female Employees:	
Your role in the Organization	
Your Gender	Male/Female/Non Binary

Section 1. Understanding the Gap

<p>1. Which roles/positions within the hydrogen sector do you think exhibit more gender disparity? (Multiple selections allowed)</p>	<ol style="list-style-type: none"> 1. <i>Research and Development</i> 2. <i>Engineering occupations (e.g., chemical engineers, electrical engineers)</i> 3. <i>Installation, maintenance, and repair technicians</i> 4. <i>Production/Operations (e.g., plant operators)</i> 5. <i>Quality Assurance/Control</i> 6. <i>Management occupations (e.g., industrial production managers)</i> 7. <i>Business and financial operations occupations</i> 8. <i>Office and administrative support</i> 9. <i>Sales and Marketing</i> 10. <i>Others (please specify):</i>
<p>2. Based on your experience, what are the primary barriers preventing the participation of women in the hydrogen sector?</p>	<p><i>(1st open question)</i></p>

Section 2. Gender Equality and Diversity Mechanisms

<p>3. Does your organization have any of the following mechanisms in place? (Multiple selections allowed)</p>	<ol style="list-style-type: none"> 1. <i>Gender Sensitivity Training</i> 2. <i>Unconscious Bias Training</i> 3. <i>Diversity and Inclusion Committees</i> 4. <i>Flexible Work Arrangements</i> 5. <i>Mentorship and Networking Programs</i> 6. <i>Transparent Promotion and Pay Policies</i> 7. <i>Employee Resource Groups</i> 8. <i>Inclusive Recruitment Strategies</i> 9. <i>Others (please specify):</i>
<p>4. What criteria does your organization currently use for the selection of participants in projects, especially those in the hydrogen or energy related sectors, in order to ensure diversity, equality, and representation? (Multiple selections allowed)</p>	<ol style="list-style-type: none"> 1. <i>Gender-neutral Job Descriptions</i> 2. <i>Blind Recruitment Process</i> 3. <i>Skill-based Assessment</i> 4. <i>Diverse Interview Panels</i> 5. <i>Representation Targets</i> 6. <i>Diverse Shortlists</i> 7. <i>Outreach Recruitment Programs</i> 8. <i>Inclusive Job Advertisements</i> 9. <i>Equal Pay for Equal Work Assessment</i> 10. <i>Inclusive Promotion Policies</i> 11. <i>Other (please specify)</i>

Section 3. Inclusion Initiatives

<p>5. List any initiatives your organization has implemented to promote gender equality and social inclusion.</p>	<p><i>(2nd open question)</i></p>
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Section 4: Monitoring and Evaluation

Key Performance Indicator	Check <input type="checkbox"/>
1. Diversity of applicant pool: <i>Monitoring the diversity of individuals applying for positions within the organization</i>	
2. Diversity of hiring panel: <i>Ensuring a diverse panel is involved in the hiring process</i>	
3. Diversity across organization levels: <i>Evaluating the distribution of diverse individuals across various levels of the organization</i>	
4. Retention across employee groups: <i>Measuring retention rates across different employee groups to assess inclusivity</i>	
5. Employee turnover: <i>Monitoring the turnover rates among diverse groups of employees</i>	
6. Adverse impact: <i>Evaluating any adverse impacts on diverse groups within the organization</i>	
7. Candidate demographics: <i>Tracking the demographics of candidates applying for positions within the organization</i>	
8. Employee advancement / Promotion rate: <i>Assessing the rate of advancement or promotion among diverse groups of employees</i>	
9. Equal pay and pay equity: <i>Evaluating the parity in pay and benefits among diverse groups of employees</i>	
10. Employee Resource Group (ERG) participation: <i>Monitoring the participation rates in Employee Resource Groups among diverse groups of employees</i>	
11. eNPS (Employee Net Promoter Score): <i>Measuring employee loyalty and advocacy among diverse groups of employees.</i>	
12. Initiative-focused DEI metrics: <i>Monitoring specific Diversity, Equity, and Inclusion initiatives within the organization</i>	
13. Other (please Specify)	(Answer)

How often do you review these indicators in order to track your performance?	<p><i>Monthly/Quarterly/ Annually/ Other</i></p>
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Section 5. Recommendations/Best Practice examples

7. Are there any sectors or industries from which the hydrogen sector can draw lessons regarding gender inclusion? Please provide specific examples with links where available:	<i>(3rd open question)</i>
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THANK YOU!

For taking the time to provide your insights. Your contributions will significantly shape the direction and effectiveness of our inclusion efforts within the H2Excellence project!

If we have further inquiries or wish to learn more about your organization's initiatives, may we contact you? (YES / NO)

If you have any questions concerning the questionnaire, please contact info@h2excellence.eu

