POWGEN

Green pathways to inclusion: POWGEN good practices on training and labour access of migrant people in the renewable energy and refurbishment sector



















POWGEN!

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Acronyms

- AIMA: Agency for Integration, Migration and Asylum
- EAC: Energy Advising Centres
- EU: European Union
- EU-27: Abbreviation of European Union (EU) which consists of 27 countries
- GHG: Greenhouse Gas Emissions
- GP: Good Practice
- GW: Gigawatts
- ICT: Information and Communications Technology
- MIPEX: Migrant Integration Policy Index
- NEET: Not in Education, Employment, or Training
- OECD: Organisation for Economic Co-operation and Development
- PNRR: National Recovery and Resilience Plan
- PV: Photovoltaic
- RES: Renewable Energy Sources
- STEAM: Science, Technology, Engineering, Arts and Mathematics
- TCN: Third Country National
- TWh: Terawatt hours
- UK: United Kingdom





1. Introduction

a. ABOUT POWGEN

POWGEN – Labour insertion of migrant people in the renewable energy sector and energy refurbishment through training and sustainable employment opportunities is a European project focused on promoting the labour inclusion of Third Country Nationals (TCNs), particularly women, within the burgeoning green sectors of renewable energy and refurbishment. The project's main goal is to enhance the employability of migrants by establishing five local pilot programs across Spain, Portugal, Germany, and Italy. These pilots will provide tailored training, intermediary services, and job placement opportunities, directly connecting participants with companies in these growing industries. The project is funded by the European Commission's AMIF-2023 programme and is coordinated by Asociación Bienestar y Desarrollo ABD in collaboration with ECOSERVEIS (Spain), CRESCER (Portugal), PRO ARBEIT (Germany), C.I.D.I.S (Italy), Regione Campania (Italy) and the EU_Conference of Peripheral Maritime Regions CPMR.

b. ABOUT THIS REPORT

The report is the result of extensive desk research conducted as part of the POWGEN project, aimed at identifying and analysing successful labour inclusion initiatives across Europe that focus on integrating third-country nationals, with a focus on women. The analysis has focused on three key pillars:

- Pillar 1 Migration: Practices supporting migrant people to foster social inclusion and help over-coming inclusion barriers.
- Pillar 2 Training and labour market inclusion: Practices that use training to enhance employability and access to jobs for individuals with diverse origins.
- Pillar 3 Refurbishment and RES sector: Approaches related to specific fields like energy
 efficiency in building and photovoltaic installation.

The research has highlighted **10+5 good practices** to improve TCN labour market access. While not all practices address each of three pillars with an integral approach, each has been selected for its relevance to the POWGEN's goals and for offering valuable insights and actionable strategies that can guide the project's further implementation.

The analysis spans a **broad geographical scope across Europe**, with selected projects running multiple pilot locations across the continent, even non-EU countries. For projects that operate in several countries (specifically EU-funded initiatives), the research has been done focusing on the national context of the coordinating country. In selecting good practices, the process aimed for balanced representation, incorporating initiatives from Eastern, Western, and Central Europe to illustrate a diverse range of practices.





POWGEN places special focus on Southern European countries that unlike their Northern and Western European counterparts have only recently become long-term destinations for migrant people. These Mediterranean countries have made progress in guaranteeing the migrant population a better access to a welfare system comparatively weaker. By highlighting practices implemented in these regions, with a more recent experience of steady migrant inflows, POWGEN is aiming at broadening the understanding and offering a fresh prospective on labour inclusion strategies within the renewable energy sector.

The report is structured as follows: it begins with an overview of the European context as it relates to the three key pillars, followed by a summary of the status of these pillars in the countries represented by the selected good practices. Next, the methodology used to select and analyse these practices is detailed. The report then presents infographics for each practice, along with a detailed analysis of their key components. The final section concludes with key takeaways and lessons learned from the findings.





2. Summary of the European context

The European Union has always been a constantly changing context with differences from country to country. This is certainly true regarding the migration phenomenon and the policies and measures to foster the inclusion of migrant people into the local labour market. On the other hand, there is a growing commitment across the EU to promote green and sustainable transitions through the development of renewable energy, resulting in a greater demand for skilled workers in the sector. The energy-green transition represents an opportunity at the European level to undertake innovative initiatives that involve migrant people and support their labour inclusion and strengthen their autonomy.

MIGRATION

In the EU-27¹, the number of resident foreigners slightly increased between 2021 and 2022 (+267,000; +0.7%). By contrast, the component with national citizenship, on the other hand, decreased by 740,000 (-0.2%). As of 1 January 2022, there were 37.8 million foreigners living in the 27 countries of the European Union, comprising 8.5% of the total population. Notably, just over 70% of foreigners live in four countries: Germany (10.9 million), Spain (5.4 million), France (5.3 million) and Italy (5 million) as it is possible to see in Figure 1. The share of the foreign population in the total resident population varies significantly between the EU member states: 47.1% of the population of Luxembourg has a foreign citizenship, compared to the 0.1% of Lithuania (Eurostat, 2023).

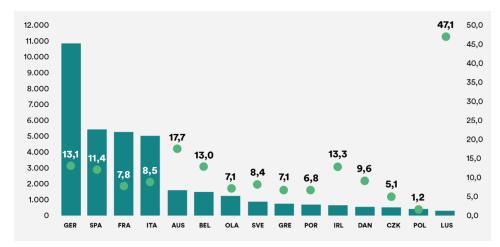


Figure 1. Foreign resident population: levels and % incidence in the 15 EU countries with the largest absolute presence of foreign nationals. Absolute values (left scale left-hand scale) and % of resident population (right-hand scale) on 1 January 2022 (EUROSTAT)

In 2022, over 3.4 million **first residence permits** were issued in the EU, compared to 2.9 million in 2021, surpassing the numbers seen before the COVID-19 pandemic (3.0 million in 2019). Notably, Germany (+190%) and Ireland (+146%) more than doubled the number of permits issued compared to 2021. In 2022, there was a particularly large increase of asylum-related permits (+60%). An increase was also registered in the number of permits issued for education (+29%), family (+29%) and other reasons (+47%). In contrast,

¹ Currently 27 members of the European Union.



the number of permits issued for work-related reasons decreased compared to 2021 (-6%). This points to a new trend in the European context, with migrant people increasingly seeking entry to the EU through asylum application in a time when work permits through quotas are becoming less common.

Moreover, 2023 saw a sharp rise in asylum applications, with 1,129,800 applications for international protection, including 1,049,000 first-time applications. This marks an 18% increase compared to 2022 and a 62% increase from 2019. In 2023, asylum seekers came from close to 150 non-EU27 countries. A substantial share of applicants came from visa-free countries (21% of asylum applicants in 2022, down from 22% in 2021), with a high number of applicants from Latin America mostly from Venezuela (6.0% of all applications), Colombia (5.6%), Georgia (2.2%), Peru (2.1%).

Following the outbreak of the war in 2022, the EU has received a considerable number of Ukrainian citizens. By the end of May 2024, EU countries hosting the highest number of beneficiaries of temporary protection from Ukraine were Germany (1,332,515 people; 31.3% of the EU total), Poland (953,255; 22.4%) and Czechia (356,405; 8.4%). Compared to the end of April 2024, the largest absolute increases in the number of beneficiaries were observed in Germany (+14,250; +1.1%), Czechia (+11.000; +3.2%) and Romania (+3.715; +2.4%). In contrast, the number of beneficiaries decreased only in three EU countries: France (-1.005; -1.6%), Poland (-675; -0.1%) and Latvia (-15; -0.03%) (Eurostat, 2023).

In 2023, the recognition rate, indicating the percentage of asylum applications resulting in decisions granting refugee status and subsidiary protection, was around 43%, the highest level since 2016 (European Union Agency for Asylum, 2024). However, this varies widely between countries. In 2022, 271,500 people seeking asylum in the EU were under 18 years old. Of these, at least 31,000 were unaccompanied minors (children and teens), with the majority fleeing from Afghanistan, Syria, and Somalia. This highlights the vulnerability of young migrants, particularly those arriving alone (Eurostat, 2023).

LABOUR MARKET INCLUSION

In 2022, 9.93 million non-EU citizens were employed in the EU labour market, out of a total of 193.5 million people aged 20 to 64, corresponding to 5.1% of the total. The employment rate in the EU in the working-age population was higher for EU citizens (77.1%), than for non-EU citizens (61.9%) in 2022.

At both national and European level, specific statistics on the occupational categories of migrant people employed in the Renewable Energies (Res) and refurbishment sector are lacking. However, in 2022, non-EU citizens were **over-represented** in some specific economic sectors (Eurostat statistics, 2024), including hospitality and food service activities, domestic work and construction. In terms of occupations, non-EU citizens were significantly over-represented among cleaners and helpers (4 times more than EU nationals), personal services workers (double the rate of EU nationals), personal care workers (5 times more than EU nationals), construction workers (1,5 times more).



In contrast, non-EU citizens are found less frequently in sectors such as Public Administration, Defence, Social Security, and Education. European reports consistently underscore the limited participation of foreign workers in skilled positions and critical areas like education and public services (Eurostat, 2023).

RENEWABLE ENERGIES & REFURBISHMENT SECTOR

The share of renewables in the EU's overall energy consumption rose to 23% in 2022, up from 21.8% in 2021. Sweden leads as the EU country with the highest share of renewable energy: 66% in 2022, mainly from hydropower, wind, solid and liquid biofuels and heat pumps (Eurostat, 2023). Finland follows with 47.9% mainly from hydropower, wind and solid biofuels while Latvia ranks third 43.3%, primarily from hydropower. The lowest shares of renewable energy were reported in Ireland (13.1%), Malta (13.4%), Belgium (13.8%) and Luxembourg (14.4%) (IRENA, 2023) as it is possible to check in Figure 2.

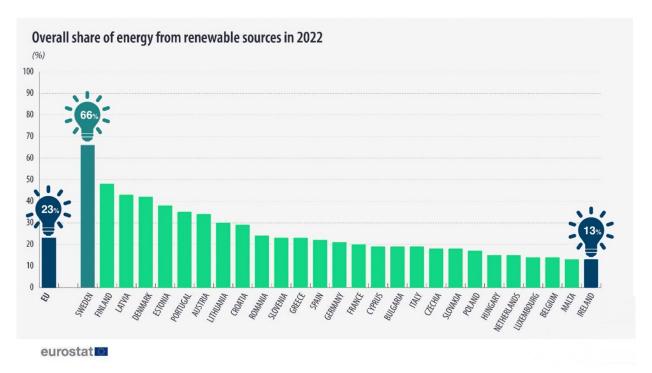


Figure 2. Overall share of energy from renewable sources in EU in 2022 (EUROSTAT)

The urgent need for green jobs is increasingly clear as the EU transitions to a sustainable economy. The European Commission's report emphasises that clean energy technologies are rapidly creating new employment opportunities (Vandeplas et al., 2022). Currently, most employment in the EU energy sector is concentrated in conventional energy sources such as oil, gas, coal and nuclear. However, clean energy technologies are rapidly becoming a dynamic area for investment and job creation, generating new employment opportunities in sectors like **construction** and manufacturing. Among the renewable energy sources, **solar PV**, **wind and bioenergy** are already well-established industries serving as significant employers both globally and in the EU. In 2020, 24% of total EU employment in the renewable energy sector was in heat pumps (318,000 jobs), followed by 22% in biofuels (238,000 jobs) and 21% in wind energy (280,400 jobs), with around 1.3 million people working directly or indirectly in the sector. This increase reflects a gross increase of 65,000 jobs (5.2%) between 2019 and 2020. The top four countries



in terms of employment were Germany (242,100 jobs, 18% of all renewable energy jobs in the EU), France (164,400 jobs, 13%), Spain (140,500 jobs, 11%) and Italy (99,900 jobs, 8%) (IRENA, 2023).

With the EU's long-term goal of becoming the world's first climate-neutral continent by 2050, as outlined in the European Green Deal, and its recent commitment to reduce its dependence on fuel imports, the EU's renewable energy sector is expected to grow significantly. This growth will likely bring an increasing demand for a skilled workforce. However, as highlighted in the last IRENA report (2024), achieving a just energy transition and unlocking the job-creation potential of renewable energy relies on several factors. A crucial requirement is to address skill shortages, ensuring that both current workers and new entrants to the labour market are adequately trained. Investing in skills is essential for translating into reality the commitments made by countries, through their Nationally Determined Contributions², to achieve the core objective of the Paris Agreement on climate change (IRENA, 2024).

THE INTERSECTION BETWEEN GENDER, ORIGIN AND LABOUR INCLUSION IN THE RES SECTOR

The European Institute for Gender Equality (EIGE) in its sectoral report "Gender and Migration," highlights that migrant women are more likely than any other group to be unemployed or economically inactive in the EU labour market (EIGE, 2021). The European Commission in 2021 addressed this concern in its *Action Plan for Integration and Inclusion 2021-2027*, which specifically called for removing barriers to employment for migrant women by promoting gender equality and inclusion. Migrant women from third countries face significant challenges in accessing the European labour market, due to intersectional discrimination based on their origin and gender. This layered discrimination is furthermore intensified by factors such as biological, social and cultural differences, age, socioeconomic status, disability, sexual orientation, religion, nationality, legal status (among other aspects) that often act as impediments and obstacles. These barriers often lead to stereotypes and biases, resulting in many migrant women falling into the NEET (Not in Employment, Education, or Training) category. As recent studies confirm, migrant women in the EU generally have a higher unemployment rate than non-migrant women and migrant men. Moreover, for women with small children, the employment rate is significantly lower (European Migration Network, 2022).

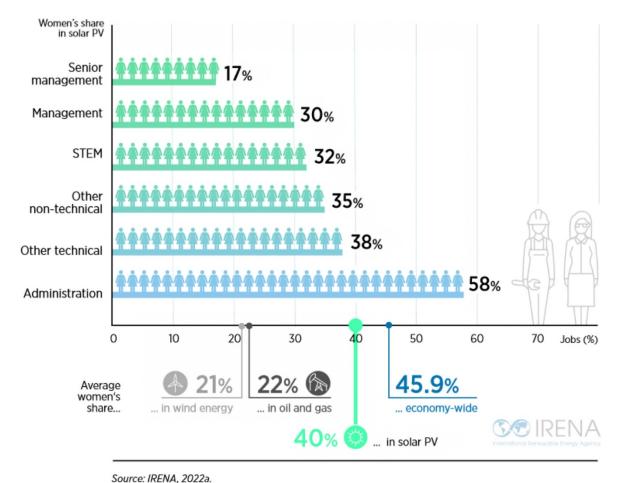
Despite many migrant women having higher qualifications and skills than the roles they typically secure, a significant number end up in informal, low-paid sectors such as domestic or care work. This issue of over-skilling arises from barriers like language difficulties, limited socio-occupational inclusion, and the lack of recognition of qualifications earned in their home countries. The European Commission estimates that one in five highly educated migrant women from non-EU countries is overqualified for their current job, a phenomenon referred to as "deskilling" (EPRS, 2023). To better integrate migrant women, targeted employment strategies must address these challenges by offering "complementary accompanying services" such as civic education, language training, and access to education and vocational opportunities, which are available across EU member states. However, the implementation and effectiveness of these measures vary widely between countries. Additionally, there is a pressing need for gender-sensitive inclusion strategies that support migrant women in their caregiving roles, such as by

² Refers to measures that countries adapt to reduce greenhouse gas emissions with the aim to mitigate climate change.



providing childcare services to facilitate job searches and participation in training (European Migration Network, 2022).

In the context of Europe's energy transition, the link between gender inequality and this shift has become increasingly important. The study *Gender and Energy: The Effects of Energy Transition on Women* (Murauskaite - Bull et al., 2024) underscores the urgent need to close these gender gaps in the energy sector. Historically, the energy industry in EU countries has been male dominated, with only limited progress in increasing female participation. For instance, the proportion of women in the energy workforce rose modestly from 20% in 2008 to 23% in 2019 (Chaumont, S. et al., 2021). While women are key players in the EU's ecological transition, they remain significantly underrepresented. According to IRENA (2023), women comprise only 24% of the energy sector workforce, with even lower participation in the fossil energy sector, where women account for just 22%. However, renewable energy presents a more inclusive opportunity, with women making up 32% of its workforce, suggesting that the shift toward sustainable energy could help promote gender equality by encouraging women's involvement in traditionally male-dominated technical and innovative fields. The graph below shows some interesting figures on the share of women in solar PV.



Source: INEINA, 2022a.
Note: PV = photovoltaic; STEM = science, technology, engineering and mathematics.

Figure 3. Women in the solar photovoltaic sector compared with other sectors. Source IRENA (2023)



Its analysis highlights the persistent gender gap in the energy sector, with women making up 40% of the workforce in solar PV—higher than wind (21%) and oil and gas (22%), but still below the economy-wide average of 45.9%. Women's presence is concentrated in administrative roles (58%), while their representation in STEM and technical positions remains low (32% and 35%, respectively). Notably, only 17% hold senior management roles, indicating a clear leadership gap.

Despite modest progress in renewable energy, the solar PV sector still fails to capitalise on the potential of female talent in critical technical and leadership roles. Targeted interventions are needed to break down barriers and foster a more inclusive, gender-balanced workforce in the renewable energy transition. To ensure a fair transition, it is crucial to implement specific measures that promote women's participation at all levels, from policymaking to the application of green technologies. Further, initiatives that support work-life balance and increase training and education in renewable energy are essential to creating an environmentally sustainable and socially equitable transition. Despite renewable energy's job growth potential, the sector continues to face a wide gender gap. Women, especially those from third countries, are often excluded from these opportunities. With proper support through vocational training, however, they could play a critical role in this growing and vital industry.

The POWGEN project seeks to tackle the gender gap in the REs sector by addressing both gender inequality and the intersectional barriers faced by migrant women. In this sense, this report provides just a general overview on the topic, as it is difficult to fully capture the intersectional aspects of the gender gap in available data especially in the labour market and specifically matching the REs sector with the TCNs. POWGEN seeks to address the gaps previously outlined by implementing targeted measures that not only increase women's participation in the REs sector, but also tackle the additional challenges faced by migrant women, such as language barriers and the non-recognition of foreign qualifications. However, it is important to highlight that the project and this report will not rely heavily on in-depth quantitative data due to the limitations of existing datasets. Current data sources, such as the EU Labour Force Survey (LFS) and Eurostat's employment databases, lack gender disaggregated data and the granularity needed to explore key intersectional aspects like ethnic origin, migration status, and educational background in the context of the REs sector (DG Energy, 2021). Therefore, POWGEN will focus on qualitative insights and practical interventions rather than detailed quantitative analysis.



3. Summary of good practices national contexts



Austria is one of Europe's long-standing countries with a history of migration. The primary sources of immigration to Austria are the free movement of labour within the EU and family reunification. Immigration from third countries for employment purposes is limited to workers with key skills and seasonal workers. However, there is limited encouragement for the recruitment of highly skilled individuals, restricting their career prospects (Biffl, 2011).

Most migrant people have free access to the labour market, but TCN family members who require family reunification permits and refugees need special inclusion support. These requirements often extend the time it takes for these groups to enter the labour market, particularly during the refugee application process. All TCN's need to sign an Integration Agreement within the first 2 years of residence that include language courses, civic education and vocational training. The participation in the courses and exams is mandatory and the non-participation is sanctioned with the reduction or the annulment of social benefits (Oesterreichische Nationalbank, 2023).

Pillar 1 - Migration

In 2022, there were 1,587,251 foreign residents in Austria, representing 17.1% of the total population (Integral Human Development, 2023). The main nationalities, among foreigners are from the EU-countries Germany, Romania and the non-EU-countries including Serbia, Turkey, Bosnia, and Croatia (Integral Human Development, 2023). In 2022 there were 109,775 asylum applicants (Eurostat, 2022). The leading countries of origin were Afghanistan, India, Syria, Tunisia, Morocco, and Pakistan (Integral Human Development, 2023).

When it comes to inclusion policies, the Migrant Integration Policy Index (MIPEX, 2020) indicates that Austria's integration policy is slightly below the EU average. This situation shows that the existing policies create more obstacles than opportunities for non-EU nationals' inclusion. Non-EU citizens do not feel secure about their future in the country to settle long-term because, although they benefit from access to basic rights and support for equal opportunities, these individuals still encounter significant obstacles related to family reunification, access to nationality, and political participation. Changes in family reunification policies have been introduced, with the obligation of family members to pass mandatory language and integration tests after arrival in the country (MIPEX, 2020).





Pillar 2 - Labour Market Inclusion

In Austria, permanent residents and those with family reunification permits have equal access to employment as nationals, though restrictions apply in the public sector and self-employment. Non-EU migrant workers often encounter challenges, as they do not have the same educational and training opportunities as nationals and EU citizens (MIPEX, 2020). Generally, TCN workers mainly work in construction, transport and agriculture, being Austria one of the main receiving countries of posted TCN workers (European Parliament, 2023).

According to Eurostat, in 2023 the over-qualification of TCN was 43.8%. Regarding the participation of adults in learning (education and training), 16.3% of TCN had access to learning in 2023, compared to 17.7% for citizens from other EU countries. Moreover, TCN experienced higher unemployment than EU-nationals, with an unemployment rate of 13,3% compared to the 7,3% unemployment rate of citizens from other EU countries in 2023.

Pillar 3 - Refurbishment and REs Sector

Austria has made significant progress in renewable energy, setting ambitious targets for increasing renewable energy and improving energy efficiency in its strategy. This strategy aims to increase the share of renewable energy to 45-50% by 2030, with 100% of the total electricity consumption being covered by renewables (Federal Ministry Republic of Austria, 2019). The national emissions are mostly from the industry sector, with 26.5 kt CO2 eq emissions (37.72%), and from transportation (29.43%) with 20.7 kt CO2 eq emissions (European Environment Agency, 2024). In line with the Integrated National Energy and Climate Plan for Austria, the government intends to promote the switch to renewable energy sources and energy efficiency measures for heating and cooling, increase the share of renewable energy in transport in 2030 by using biofuels and expand the share of e-mobility, strengthening and developing public transport with electrification and mobility management proposals.

The major issues at local level that do not allow the full work inclusion of the TCNs is mostly related to the integration policies in Austria.



Despite third-country nationals playing a significant role in the Italian labour market, migrant workers in Italy continue to face various problems such as precarious working conditions often due to low qualifications and lack of social inclusion. The level of labour market participation of women in particular is precarious. Therefore, numerous critical issues in the labour insertion system remain, showing the need for a new governance of migrants' inclusion processes. However, in Italy, differences concerning both the composition of the migratory phenomenon and the productive economic fabric of the territories must



be always taken into account. The renewable energy market, on the other hand, marks a continuous and significant growth that envisages the creation of new jobs in the immediate and near future.

Pillar 1 - Migration

Non-EU citizens with legal residence in January 2023 were 3.6 million. National communities with greater demographic breadth are the Moroccan, Albanian and Chinese communities. In 2022, the number of first issues of residence permits grew significantly (+126.8% on an annual basis) with over half of the residence permits (50.9%) issued for family reasons, 21.1% for work, 12.9% for asylum and humanitarian reasons, and permits for study and for reasons of health, religion and choice of Italy as residence represent, respectively, 7.3% and 7.9% of the total number. Among those 88,000 who had applied for asylum, less than half were granted some form of international protection, temporary protection or special protection under national law. The main countries of origin of asylum seekers were Bangladesh, Pakistan, Egypt, Tunisia, Nigeria and Ukraine. International protection was granted almost exclusively to people from Ukraine, Somalia, Mali, Burkina Faso, Venezuela, Sudan, Syria and Iraq. In the Migrant Integration Policy Index (MIPEX), which measures integration policies across eight policy areas, Italy achieves a score of 58 out of 100. This score is higher than the average of 49 and positions Italy as slightly above average among EU and Western European (EU15) / OECD countries. Italy's approach to integration is classified as "Temporary Integration", foreign citizens in Italy can benefit from access to basic rights and halfway favourable policies on equal opportunities, but they do not enjoy the long-term security to settle permanently. Political participation and access to nationality are still major obstacles, as proven by the recent political debate opposing opening citizenship to those of migrant background who have studied in Italy (MIPEX).

Pillar 2 - Labour Market Inclusion

In January 2023, 2.4 million foreign workers registered in Italy (+5.2% in one year) representing 10.3% of the total workforce. The employment rate is 60.6% (60.1% for Italians), unemployment is 12% (7.6%) and inactivity is 31.2% (34.8%), all indicators that have improved compared to 2021. The positive data are counterbalanced by confirmation of the critical aspects of employment of migrant workers, starting with the strong gender gap: migrant women have significantly worse employment (47.5%), unemployment (15.2%) and inactivity (43.8%) rates than men. The report also highlights the low concentration of foreign workers in managerial profiles (more than 75% of workers have blue-collar qualifications), with consequently lower salaries, and over-qualification: the share of foreign graduates employed in low- or medium-skilled occupation is 60.2% for non-EU nationals and 42.5% for EU nationals, compared to an estimated 19.3% for Italians. Italy stands out compared to other OECD countries on various aspects. Half of Italy's population with migrant background has only low formal education, the second highest percentage in the OECD. At the opposite end of the educational spectrum, Italy has the lowest percentage of graduate migrant people in the OECD area. Only 12% of people with migrant backgrounds in Italy have a degree, compared to 20% of Italian nationals. While the percentage of migrant people with high education has increased in all countries in the decade to 2020, Italy increased only marginally, by



less than 1%, the lowest figure in the OECD. Only a small percentage of migrant people in Italy, 2%, participated in adult education courses in 2020, compared to around 6% in the EU as a whole.

In 2021, 28% of migrant people employed in Italy worked in low-skill jobs, compared to just 8.5% of the country's nationals. Only 13% of foreigners employed in Italy in 2021 had occupations classified as requiring higher skills, while 39% of national people employed had jobs of this type. These jobs often present other challenges, such as low incomes and little job security.

In 33% of cases, both EU and non-EU foreigners find their first job in less than 3 months. Approximately 22% of them are employed from 3 to less than 6 months, while the incidence of those who are employed from 6 to less than 12 months is 11.7% (EU foreigners) and 14.4% (non-EU foreigners). It should also be noted that 17.8% of EU foreigners and 12.4% of non-EU foreigners have already found a job upon arrival in Italy.

Gender is also a reason for discrimination that is more present among Italians (33.9%) compared to EU (3.3%) and non-EU foreigners (3.8%), while discrimination due to foreign origins and religious beliefs involves 91.2% of non-EU foreigners, 87% of EU foreigners and 5.6% of Italians. Non-EU foreigners identify poor knowledge of the Italian language as the main obstacle in finding work (30.9% of the total). For EU foreigners, the greatest difficulty is represented by the lack of jobs suited to the skills they possess (23.4% of the total) (Ministero del Lavoro e delle Politiche Sociali, 2023).

Pillar 3 - Refurbishment and REs Sector

Solar and wind energy produced a record amount of energy in Italy in 2023. Wind farms generated a record 23.4 TWh, while solar panels reached 30.6 TWh. Renewable sources, including hydropower, met nearly 37% of the country's electricity demand. Although these data are significant and encouraging, suggesting that the country is finally heading in the right direction, Italy is still far from reaching the energy transition target of 70% electricity from renewable sources by 2030 (Eurostat, 2023). In the case of solar panels, despite this significant growth, new installations are still not enough to reach the targets. Based on the average installations over the last three years, Italy will reach 90 GW of installed renewable capacity only in 2046. Therefore, although progress is evident, the pace of installations must be accelerated to ensure a sustainable energy future (Camera dei Deputati, Servizio Studi, 2024).

In the first six months of 2024, production from renewable sources exceeded production from fossil fuels for the first time. This is what emerges from Terna's Report. From January to June 2024, clean sources covered 43.8% of energy demand. As for photovoltaics, in the first six months of the year, solar in Italy produced 17,603 GWh of clean energy, an increase of 17.4% (Terna Driving Energy SPA, 2024).

On the refurbishment front, with 81% of buildings more than 30 years old and approximately 75% of the Energy Performance Certificates issued in 2021 with an energy class equal to or lower than E, the redevelopment process of the Italian real estate is urgent and strategic. In this context, the investments of the National Recovery and Resilience Plan (PNRR) represent an important opportunity but is not enough: with the PNRR funds a renewal rate of 1.2% is achievable, far from the 2.1% European target. The Directive CASA Green creates the conditions to accelerate the process of energy efficiency in the building sector, in the coming years Italy will have to invest massively and promote policies to encourage the smart transition. (Camera dei Deputati, Servizio Studi, 2024)



This revolution is influencing the job market. Alongside the already known professions, new ones will emerge, applied to electricity networks, energy communities and all those jobs related to reuse and the circular economy to produce energy. This could generate, between now and 2030, over 360 billion euros of added value and 540 thousand new jobs in the electricity sector and its industrial supply chain.

GERMANY

The labour market participation of third-country nationals in Germany is notably lower than the national average. Despite a significant increase in the number of employed third-country nationals contributing to social security between 2014 and 2017, their overall employment rate remains comparatively low. For instance, while the employment rate for German nationals was approximately 75% in 2017, the rate for third-country nationals was only around 53% during the same period. This disparity is partly attributed to the higher influx of migrant people, particularly asylum-seekers, whose employment integration often faces additional challenges (Statistisches Bundesamt 2024).

The number of asylum seekers arriving in Germany surged in recent years, reaching over 722,000 in 2015 alone. Many of these individuals, lacking local language skills and recognized qualifications, encounter significant barriers to entering the labour market. Although the German government has implemented a variety of measures to address these challenges—such as enhanced education and training programs, job-related skills development initiatives, and anti-discrimination legislation—the impact has been mixed (Das Bundesamt für Migration und Flüchtlinge - BAMF, 2024). For example, the inclusion courses and vocational training programs introduced aim to improve job prospects but reports from the Federal Office for Migration and Refugees (BAMF) indicate that progress is slower than anticipated. In addition, the support for self-employment has seen moderate success; however, the overall effectiveness of these initiatives is still under review. To bridge the gap, further action is required to enhance the inclusion process. This encompasses better access to language acquisition programs, more streamlined recognition of foreign qualifications, and the development of comprehensive support systems to guide third-country nationals through the job market.

Pillar 1 - Migration

Migration in Germany reflects a diverse and complex phenomenon. As of recent data, Germany hosts a significant number of migrant people, including those from Turkey, Syria, and Poland, among others. Approximately 18% of the resident population in Germany are non-German nationals, with around 6% holding refugee status or international protection. The demographic distribution of migrant people shows a diverse age range, with a notable proportion of younger individuals and families. Gender distribution among migrant people is relatively balanced, though specific nationalities may show variations. Germany has made progress in inclusion, but challenges remain. The Migrant Integration Policy Index (MIPEX)



highlights that while Germany excels in areas like anti-discrimination laws and political participation, it faces ongoing issues in areas such as access to long-term residency and education. Practical challenges include language barriers, housing, and transport, which can hinder the inclusion process.

Pillar 2 - Labour Market Inclusion

Germany's labour market inclusion of third-country nationals (TCNs) reflects both progress and challenges. Recent legislation has aimed to reduce barriers to employment, but limitations still exist, such as restrictive work permits and long recognition processes for foreign qualifications. TCNs often face higher unemployment rates compared to EU citizens, with a notable disparity in employment characteristics. For instance, in 2022, the unemployment rate for TCNs was about 15%, compared to 5% for EU citizens. TCNs are frequently concentrated in low-skilled sectors, with underrepresentation in executive roles. Trends from 2020 to 2022 indicate that while there have been improvements in job placements for TCNs, gaps persist in gender and sectoral representation. Many TCNs experience overqualification issues and are less likely to access professional training opportunities compared to their EU counterparts. Local issues such as discrimination and inadequate support services further exacerbate these challenges, particularly for TCN women who face additional barriers such as cultural expectations and limited access to flexible work arrangements.

Pillar 3 - Refurbishment and REs Sector

Germany's transition to a green economy has encouraged demand for skilled professionals in renewable energy and construction sectors. The reduction of gas emissions has been a key focus, with significant progress made in decreasing emissions in the energy sector through increased investment in renewable energy sources. Government policies, such as the Renewable Energy Sources Act (EEG), provide incentives and support for the development of green technologies (BMWK, 2024). However, the inclusion of TCNs into these sectors faces challenges. Local issues include the lack of recognition of foreign qualifications and limited access to sector-specific training programs. For TCN women, additional barriers such as gender biases and fewer networking opportunities further complicate inclusion. Despite state investments and policies aimed at fostering growth in the renewable energy sector, these integration challenges remain significant. Addressing these issues is crucial for ensuring that the benefits of the green transition are equitably distributed, and that TCNs can fully participate in Germany's sustainable economic future.





Portugal has been playing a key role in developing an integrated approach related to migration policies, involving several stakeholders to guarantee equal rights and opportunities to all (OLIVEIRA, 2020). In 2023, the number of residence permits exceeded one million, more than double the figure in 2022 with migrant people representing 14.4% of the contributors to Social Security. However, there are some dimensions that need to be improved related to migrant inclusion, namely access to accommodation/housing, education level recognition and civic participation (OLIVEIRA, 2023). Recently, there was a significant restructuring of the entity responsible for migration, now called Agency for Integration, Migration and Asylum (AIMA). This restructure, jointly with the existing pending processes for residence permit and the recent government elections contributed to significant obstacles regarding the inclusion of migrant people in the labour market and access to social welfare, namely the emission of residence permits and the regularisation of migrant people. Therefore, it is crucial to reassure the fundamental rights of migrant people in Portugal, meaning a more efficient and agile access to documentation, decent work conditions, Portuguese language learning and family reunification processes (OLIVEIRA, 2023).

Pillar 1 - Migration

According to the Agency for Integration, Migration and Asylum (AIMA), formerly known as SEF (immigration authority), in 2022, there were almost 800,000 foreigners, in which 76% are non-EU citizens, representing around 8% over resident population. The main nationalities of people in regular status (with residency permit) are Brazil, United Kingdom, Cape Verde and India. In terms of migratory flow, Angola and Bangladesh are also included in the list. In 2022, the main type of granted residency permits is for work (56%), followed by family reunification (29%) and other motives (15%). There was a strong preponderance of professional activity from Asia (India, Bangladesh, Pakistan and Nepal) (OLIVEIRA, 2023).

Regarding the gender and age distribution, 55.3% are men and 44.7% are women and are in working age (18-65 years old) (OLIVEIRA, 2023). The asylum requests in 2022 increased by 29.5% with 1991 applications (OLIVEIRA, 2023). According to MIPEX (MIPEX, 2020), Portugal is one of the leading ten countries on inclusion and its policies improved on all dimensions of equal rights, opportunities and security for migrant people. In 2019, Portugal's inclusion policies were above average in all policy areas except migrant people's health.

Portugal started to address its areas of weaknesses on migrant people's health and education by improving the access to healthcare and health information and supporting cultural diversity at school. Regarding health, Portugal provided healthcare access for international protection and asylum-seekers and fostered the involvement of migrant people in health information and in schools, cultural diversity is included in the program of civic education classes.





Pillar 2 - Labour Market Inclusion

Portugal has been introducing new measures to promote regular, safe and orderly migration flows, combating irregular immigration and trafficking in human beings, and to the needs of labour (OLIVEIRA, 2023). Portugal ensures equal access to the labour market and facilitates the access to employment and training. People with residence permits, temporary residence permits, and international protection requests have the right to access education and the labour market and are allowed to exercise professional activity. Migrant people, international protection beneficiaries and asylum seekers must have a Social Security number to access employment, and their working contract must be in written form, according to the Labour Law.

Even with the implementation of these measures, TCNs face more unemployment and job precariousness. In 2022 the unemployment rate of TCN (14.3%) was more than double of the national average (6.1%) (PORDATA). The employment rate of TCN compared to EU nationals is lower, with an accentuated difference in women. The employment sectors in which TCN are concentrated are the sectors where there was a need of labour workforce in Portugal, namely construction, restaurants, tourism, agriculture and fishing (OLIVEIRA, 2023).

The recent legislation also promoted the entry and stay of foreigners and the increase of residence visas and residence permits for highly qualified and teaching activities. According to Eurostat, in 2022, the overqualification of TCN was 42.9% and in 2023 was 48.1%.

Regarding the participation of adults in learning (education and training), in 2023, 15.6% of TCN had access to learning, in contrast to 13.5% of the citizens from another EU Country (EUROSTAT).

The major issues at local level that do not allow the full work inclusion of TCN is the high-level diploma recognition due to the costs associated to recognize and the need of the recognition in areas such as health, engineering and law, which are regulated by upper entities and the attractiveness and access to the development of green skills and training due to the fact that most of the trainings only accept people who speak Portuguese fluently. The full work inclusion of TCN women is mainly the domestic responsibilities that don't allow them to fully participate in the labour work and inclusion.

Pillar 3 - Refurbishment and REs Sector

In 2022, energy-related activities, including transportation, accounted for 67% of Portugal's national emissions. Emissions from agriculture represented 12.3%, amounting to 8,288 kt CO2 eq; waste contributed 10% of emissions, or 5,643 kt CO2 eq; and the industrial sector was responsible for 10.4% of emissions (Agência Portuguesa do Ambiente, 2024). The Portuguese government implemented energy incentives in 2021, 2022 and 2023 to mitigate situations of energy poverty to vulnerable families and improve the energy performance of their housing and their living conditions, to create Renewable Energy Communities and collective self-consumption and to promote the rehabilitation, the decarbonization, the energetic and hydric efficiency and the circular economy by improving the energy and the environmental performance of the buildings in order to reduce at least 30% of the consumption energy of the intervened buildings (Fundo Ambiental).

Portugal has a strong commitment to incorporate renewable energies in the production of electricity and reduce the carbon emissions and will reinforce the public policies with the creation of a Mission Structure



for Renewable Energy, the improvement of processes; the reinforcement of the means of the licensing entities; the definition of «Go to Areas»; the creation of a faster lane for the licensing projects with great maturity; improvements in collective self-consumption and Renewable Energy Communities with new tools, incentives and divulgation; and the reinforcement of the Eolic onshore capacity with the equipment of the current wind farms with recent technology and greater capacity and production (XXIII Governo - República Portuguesa, 2023). On the energy consumption side, there will be strengthened measures to encourage the decarbonisation of transport, industry and buildings and policies will be created particularly for the most vulnerable families and the middle class (XXIII Governo - República Portuguesa, 2023).

The major issue at the local level that does not allow the full work inclusion of TCN people (men and women) is the high-level diploma recognition because of the costs associated with recognition and the need for the recognition in engineering, which is regulated by an upper entity, as well as the language barrier.

At the European level, Portugal is in third place in the group of European countries that most invest in clean energy and the goal is to reach 2030 with 85% of electricity produced only with natural resources (Rito, 2023) and the energy transition strategy in Portugal represents 75 billion euros of investment in green energy production projects (XXIII Governo - República Portuguesa, 2023).



Spain's socio-economic context is shaped by its significant migrant population, evolving labour market, and growing focus on renewable energies. While Spain has made progress in the inclusion of migrant people, there are still challenges, particularly in employment and access to legal residency. Migrant people, especially third-country nationals (TCNs), often face obstacles such as overqualification, restrictive legal frameworks, and limited opportunities in skilled jobs. Meanwhile, Spain's expanding REs sector offers potential for economic growth and job creation, but access to these opportunities remains uneven, particularly for marginalised collectives such as migrant workers.

Pillar 1 - Migration

According to the 2023 population census (INE), there were 6,089,620 foreign residents in Spain, making up 12.66% of the total population. The largest foreign nationalities were Moroccan (14.7%), Romanian (10.3%), Colombian (7.5%), Italian (5%), and British (4.7%). As of December 2023, 2.9 million foreigners held valid residence permits, with 59.14% having long-term residency and 38.57% holding temporary permits. Most of the foreign population (79%) were aged 16 to 65, with 15.6% aged 0 to 15, and 5.25% aged 65 or older (Observatorio Permanente de la Inmigración, 2024). Spain scores 60/100 on the Migrant Integration Policy Index (MIPEX), performing better than the global average of 49. According to MIPEX conclusions and recommendations, migrant people in Spain face more opportunities than obstacles in their inclusion, though significant barriers remain, particularly in accessing nationality. While Spain promotes a comprehensive approach to inclusion, it still falls short of the most favourable policies seen in the MIPEX



"Top Ten" countries. Migrant people enjoy many basic rights, but Spain's policies only partially ensure equal opportunities for non-EU citizens.

Pillar 2 - Labour Market Inclusion

In general, since 2014 the number of foreigners working in Spain has been increasing, except for the years of 2020 and 2021, due to COVID-19 which limited migration movements and also constrained the job market. Over the past three years, since April 2020, 696,224 foreigners have joined Spain's Social Security System, reaching a record 2.67 million by the end of 2023. Although foreigners represent just 12% of total employment, their growth rate is three times that of nationals—35% compared to 10%. While employment hit a low in April 2020, the labour market quickly recovered, surpassing pre-pandemic levels by 2021, with foreigners accounting for a third of new workers despite their smaller share of the workforce.

According to Social Security data, in December 2022, there were approximately 2.46 million foreign workers affiliated with the Social Security system, of which 1.63 million were third-country nationals (TCNs), primarily employed in self-employment or household sectors (Ministerio de Inclusión, Seguridad Social y Miraciones, 2023). Spain has the highest rate of overqualified foreign workers in the EU, with 43% of migrant people arriving in 2022 holding tertiary education, yet many are concentrated in unskilled jobs with poor working conditions (Cuadrado et al., 2024). This misalignment between qualifications and employment is strongly tied to Spain's restrictive legislative framework for third-country nationals (TCNs), which limits their inclusion into the labour market. Migrants must secure work contracts in sectors with unmet labour demand, leaving many unable to meet permit requirements and in irregular administrative situations for 3 to 5 years. This pushes them into the informal economy, where they face higher risks of exploitation and discrimination. A study identified key barriers to obtaining permits, including proving continuous residence, securing full-time job offers, financial requirements for employers, and bureaucratic delays (Red Acoge, 2021). Antiracist organisations also point to delays in recognizing foreign qualifications and difficulties in accessing the asylum process (CEAR, 2023). Migrant women, in particular, face challenges due to labour market segmentation, often being employed in low-skilled jobs like domestic work and hospitality with lower wages and fewer labour protections. Many also have caregiving responsibilities, further limiting their employment opportunities and contributing to their marginalised position in the workforce (Red Acoge, 2018).

Pillar 3 - Refurbishment and REs Sector

Although Spain is a country that still relies on fossil fuel consumption, the production of renewable energies has increased exponentially in recent years, especially in 2023, contributing to the reduction of greenhouse gas emissions (GHG). In Spain, wind power is the leading source of green energy, accounting for 24.5% of total production, followed by combined-cycle plants at 20.9%, solar power at 20.3%, and hydropower at 13.6%. Photovoltaic energy installations increased by 28% over the past year, contributing to a remarkable 2023, with renewable energy production rising by 15.1% compared to 2022. This marked the first time in history that over half of the country's energy mix, 50.3%, was derived from wind, solar, and hydropower sources (Red Electrica, 2024). Currently, the most polluting sector is transport, which represented 29.9% of GHG in 2021, followed by industrial activities (22.6%), agriculture and livestock (11.4%), and others



(MITECO, 2023). According to the first MITECO report on ecological transition within the Recovery, Transformation and Resilience Plan, there were more than 4,000 million euros dedicated to the generation of renewable energy until last October 2023 (Giorgi, 2023). Especially for the ongoing year, 2024, 2,300 million euros are being invested through the same Recovery Plan in different matters, like renewable energy, energy communities, and other areas of interest (García Ceca, 2024).

Since the early 80s, Spain has been enforcing laws and policies to foster the implementation of green energy. One of the most relevant laws was the Real Decree 413/2014, of June 6, in which it was declared that electric energy production was regulated by renewable energy sources, cogeneration and waste (MITECO, 2024). The newest plan, and very significant, is the Energy and Climate Integrated National Plan (from 2021 to 2030), which foresees a significant growth of renewable energies in the country. Its main objective is to increase the use of renewable energy and take advantage of what this opportunity can bring in social and economic terms. The money invested is more than 3 million euros (Gobierno de España, 2024). Regarding employment, it can be stated that jobs related to renewables have been increasing in the last few years. In Spain, direct jobs in the renewables sector increased from 50,107 in 2018 to 70,780 in 2021 (León, 2023). But counting both direct and indirect jobs in the sector, by 2021 more than 100,000 people were employed in the sector, which was later exceeded in 2023, when more than 130,000 job positions were covered.

Finally, in recent years, the presence of women in the green energy sector has been increasing. Between 2015 and 2021, the number of women working in the sector represented 38,1%, even exceeding the European average of 34%. However, it must be considered that most of those jobs were related to administrative duties. The presence of women in high qualification positions is still low (Transición Justa, 2022). The green energy sector in Spain, despite the rapid changed it is perceiving, is a male-dominated sector, mainly because traditionally women were not enough encouraged to undertake engineer or energy careers, as well as the difficulties that they may face when it comes to family conciliation or the lack of women referents in the sector.

SWITZERLAND

As a non-EU country with a sui generis migratory and economic fabric, Switzerland stands out as a case apart. Migration from both EU and non-EU countries, with different characteristics in terms of qualifications and access to the labour market, nevertheless reconfirms the centrality of this phenomenon for the country's development. Third-country nationals often face significant challenges in terms of recognition of qualifications and inclusion in the labour market, leading to a concentration in low-skilled sectors. The renewable energy market, on the other hand, shows continuous and significant growth, which promises the creation of new jobs in the immediate and near future.



Pillar 1 - Migration

At the end of December 2022, 2,241,854 (30% of total resident population) foreign nationals were living permanently in Switzerland. In 2022, the number of permanent foreign resident population increased by 20,886 units compared with the previous year. While 114,393 persons moved to Switzerland from EU and EFTA (+19,523) countries, the figure for Third Country Nationals was 48,042 units (+1363). For up to 52.3% moving as permanent resident population, the reason for moving in was to take up employment (84,927 individuals, +26.8% compared to 2021). Family reunification accounted for 26.5% of immigration for longterm residence. In this context 43,026 persons (+7.4% compared to 2021), 16.5% were family members of a Swiss national. Permanence for education or training purposes accounted for 10.4% of the permanent resident population (16,827 persons, +4.0 %). In 2022, 74,959 applied for the international protection status, the status was granted in 72,611 cases. More than half of applicants were from Afghanistan, Turkey or Eritrea. (Swiss Federal Office of Migration) Switzerland scores 50/100, slightly above MIPEX countries (49) and among EU and Western European (EU15) / OECD countries. Migrant people in Switzerland face major obstacles in access to nationality, and discrimination. Switzerland's approach to integration is classified by MIPEX as "Temporary Integration". Foreign citizens in Switzerland can benefit from access to basic rights and halfway favourable policies on the access in the labour market, but they do not enjoy the long-term security to settle permanently, invest in integration and participate as full citizens (MIPEX).

Pillar 2 - Labour Market Inclusion

The impact of migration on the labour market can be illustrated by examining the proportion of people working in each occupation who were born abroad. In several occupational groups, the proportion of migrant people is near or over 70%. These include cleaners and helpers as well as plasterers. These are followed by other manufacturing, construction and low-skilled service occupations, which are therefore essentially dependent on migrant people. Common occupations (more than 50,000 individuals) which show a high proportion of migrant people, include stationary plants and machines operators (62%) as well as cooks (59%). At the opposite end of the spectrum, several occupations - such as agriculture, floristry, early childhood education, primary school teaching, and police work, to name just a few- have less than 15% migrant workers. Accordingly, mid-level occupations in the services sector and public sector are characterised by lower presence of migrant people. (Swiss Federal Office of Migration).

Pillar 3 - Refurbishment and REs Sector

The renewable energy market in Switzerland is likely to see growth due to increasing concerns about climate change. This has led to a push for cleaner power generation options, with the hydro segment leading the market. The government's agreement to reduce greenhouse gas emissions by half by 2030 is expected to create opportunities for the renewable energy market. Further growth is expected due to an increase in installed capacity for solar and hydro power. Despite the potential for growth, the renewable energy market in Switzerland is moderately consolidated, with a few key players dominating the market. These firms are involved in a range of activities, from constructing hydropower plants to launching solar projects. The industry also sees companies exploring digitalization in hydropower plants and the



combination of solar and hydro energy for increased efficiency and reliability (Mordor Intelligence; Swiss Federal Office of Energy).

UNITED KINGDOM

The United Kingdom was the first country to define energy poverty in the 1990s. Brenda Boardman described it as those households whose expenditure in energy services exceeded 10% of their total income (1991). This is why the following context is set in 2011, as at that time, although discussions on fuel poverty were rare, one of the first projects tackling this problem emerged, making it relevant for the social-related issues in the energy field. Nowadays, in the UK fuel poverty refers to those households that must spend a high proportion of their income to maintain a comfortable temperature in their home throughout the whole year. Fuel poverty is mainly driven by three key factors: household's income, energy prices, and energy consumption (which is also affected by the energy efficiency of the house) (House of Commons Library, 2024).

To address and reduce fuel poverty in the UK, the Warm Homes and Energy Conservation Act 2000 was enacted. The Act's main purpose was to reduce fuel poverty across the country through specific strategies, as well as identifying the targets that may require fuel poverty regulation (Legislation Government UK, 2000). Following this Act, numerous strategies have been developed in the country to fulfil the objective of reducing fuel poverty. One of them is the Fuel Poverty (England) Regulations 2014, which assesses fuel poverty based on the metrics between a household income and its energy bill. Some examples of current fuel poverty strategies include energy-saving practices, energy efficiency programs, financial assistance and social support programs (Access Group, 2024).

The use of renewable energies in the UK has changed considerably over the past 30 years. By the end of 1991, renewables represented just 2% of all electric use in the UK, however in 2013 the percentage rose to 14.6% (National Grid, 2024). Notably, in 2017, the UK was one of the European leaders in the growth of renewable energy generation, with green energy production surpassing fossil fuels for the first time in 2019.

Nowadays, in the 2020s, the green energy sector is at its highest numbers, both in turnover and employment estimates since the first numbers analysed in 2015, including an increase in full-time job positions (Office for National Statistics, 2024).



Pillar 1 - Migration

In 2011, according to our relevant timeframe for the selected good practice, the Census for England stated that foreign-born population in the UK represented 7.3 million people, which was 14% compared to the 53 million usual residents of England. For this migrant share, 46% held a UK passport while 51% held a non-UK passport. Most of them were born in Europe or Asia, mainly India, Poland and Pakistan (Migration Observatory at the University of Oxford, 2011). Regarding gender parameters, 52% of non-UK born residents were female and 80% were aged between 16 and 64 years of age. It is also relevant to see that the number of refugees that were granted asylum in the UK was 193,494 people in 2011 and 117,226 in 2014, showing a clear decrease as years passed by (Macrotrends, 2024).

Pillar 2 - Labour Market Inclusion

According to national statistics, most of both UK and foreign nationals aged 16 and over were economically active and employed in 2011. Among those employed, foreign nationals were primarily engaged in professional and elementary occupations. Language barriers were minimal, with only 1.7% of migrant people reporting an inability to speak English (Office for National Statistics, 2013).

In the energy sector, it is notable that in 2011, the electricity, gas, steam, and air conditioning supply industry employed 46,580 female workers (both nationals and foreign nationals) aged 16 to 74. The construction sector counted 275,105 women workers (Office for National Statistics, 2011). Generally, male workers outnumbered female workers in these two sectors in 2011. It should also be considered that migration flows in the UK tend to be polarised. Many migrant people hold highly paid, prestigious positions (e.g., managers, doctors, university professors), making up 42% of migrant people in 2009, while others are employed in lower-wage roles such as cleaning, babysitting, and agricultural work (González, 2009).

Pillar 3 - Refurbishment and REs Sector

The green energy sector was not a popular job sector for migrant people during 2011 and 2014. This was especially true for women in the UK, where in 2011, over eight out of every ten women workers were employed in the service sector (University of Oxford, 2016). However, green jobs in the UK have seen substantial growth in recent years. For example, in 2022, green jobs were estimated at approximately 640,000, representing an 8.4% increase from 2021 and a 19.9% rise from 2020 (Office for National Statistics, 2024). Women are also increasingly represented in the green energy sector, though they tend to occupy more junior and lower-paid roles. According to the NESTA 2020 report, women account for 57.9% of green jobs, but many of these roles are less well-compensated, which contributes to the gender pay gap within the renewables sector (Le-Blanc and McIvor, 2020).



4. Methodology

This chapter provides an overview of POWGEN methodology designed to identify and analyse good practices through a structured approach grounded in three core pillars: migration, access to the labour market and training, and the renewable energy and refurbishment sectors. These pillars constitute the foundation of POWGEN's analytical framework, guiding the selection, evaluation, and development of initiatives that promote third country nationals (TCNs) training and labour market access, with a specific focus on the energy sector.

The process began with the selection of 15 initiatives or projects, chosen for their potential relevance across these pillars. After an initial evaluation, 10 of these were ultimately identified as "good practices" based on their eligibility and effectiveness in addressing the core pillars. This selection process ensured that each chosen practice was well-aligned with the POWGEN project objectives, effectively contributing to a balanced perspective across migration, labour market inclusion, and renewable energy. In the POWGEN framework, a good practice refers to an initiative or project that aligns with the three core pillars which create the baseline for this report: migration, training and labour market, renewable energy and refurbishment sectors. These practices are notable for their success, feasibility, and positive outcomes, making them recommended models for adaptation and replication across different contexts by professionals and policymakers. In POWGEN, the focus is on good practices rather than best practices, acknowledging that each initiative, while effective, has areas that could be enhanced and improved. Indeed, some practices that did not meet the criteria listed in the next section have been still included, as they provide valuable insights and demonstrate impactful results that contribute meaningfully to the report.

A primary goal of the methodology was to assess the selected initiatives in a balanced manner, ensuring that no single pillar overshadowed the others. This balanced approach is crucial for drawing insights that reflect a comprehensive understanding of the interconnections among migration, labour market inclusion, and the energy sector specificities. Additionally, the gender perspective was integrated throughout the analysis respecting the POWGEN project mission. Recognising the unique challenges faced by migrant women in accessing the labour market, the methodology included specific considerations for gender inclusion as a critical indicator within POWGEN's scope.

Step to step process

The POWGEN methodology entails a structured approach for developing, collecting, and disseminating good practices in the field of renewable energy, focusing on successful training and labour inclusion programs across Europe with the aim to replicate these good practices in other contexts. The process is divided into clear steps with specific objectives and timelines to ensure the effective homogenization of research and the production of a comprehensive joint good practices report as a result, including key takeaways as the main conclusion of our study.

The first phase established a unified approach to analyse and identify good practices, ensuring consistency across all partners. To achieve this, guidelines and a standardised template for



project/initiative reports and its related national context were developed, providing a common analytical framework and clear guidance for data collection.

During the **second phase**, partners gathered initial examples of good practices, selecting between two and three projects and initiatives that aligned with the established criteria that will be outlined below. Following this, 10 specific initiatives and practices **were selected and analysed**, resulting in ten well-documented good practices, each with country-specific insights.

The **compiled practices were then integrated** into the present Report, emphasising the sustainability, efficiency, replicability, and scalability of each initiative in line with POWGEN objectives. The report concludes with a set of **key takeaways** that cast light on the most important aspects and strongest points of the good practices.

After final validation and translation in 6 languages (Italian, French, German, Portuguese, Spanish) the report will be disseminated widely, targeting key representatives and organisations to maximise awareness and encourage the adoption of these practices. This methodology ensures a structured approach to collecting, analysing, and sharing good practices, supporting a more equitable and sustainable renewable energy model across Europe.

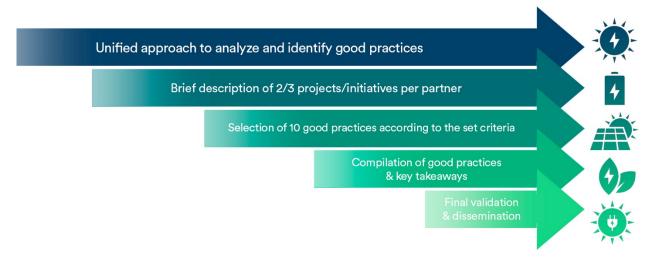


Figure 4. Visual representation of the step-by-step methodological process

Criteria for the selection of a good practice and the process

As highlighted in the introduction, this report is structured around three essential pillars: migration, training and labour inclusion, renewable energy and refurbishment sectors. These pillars form the backbone of the analysis, reflecting not only the areas of focus but also the broader goals of the POWGEN project. In the search for good practices, these key concepts served as a guiding framework, ensuring that the identified practices were aligned with the project's overarching aims of supporting migrant inclusion and advancing sustainability in the labour market.

First, the selected good practices needed to target the migrant collective, specifically third-country nationals (TCNs), with a particular emphasis on women. Migrant women often face compounded barriers due to both their gender and migrant status, making it crucial to identify practices that directly address



their unique challenges, such as language barriers, cultural adaptation, and access to appropriate training opportunities. Second, it was essential that these practices included comprehensive training programs designed to help participants access meaningful employment. Training is a fundamental component in bridging the gap between migrant people and the labour market, especially in specialised sectors like the energy one. The training had to be practical, market-oriented, and capable of enhancing the participants' employability, equipping them with skills relevant to the current job market needs and specificities. Third, the good practices needed to operate within the refurbishment and green energy sector, which has seen a surge in demand in recent years due to the push towards sustainability and ecological transition. This sector not only offers numerous job opportunities but also aligns with the broader societal shift towards environmentally conscious economic models. By focusing on this sector, POWGEN project and consequently this report aims to position migrant workers, especially women, in roles that contribute to both their personal growth and the green transition.

In POWGEN's desk research, the selection criteria for good practices went beyond these foundational pillars. The initiatives had to be relevant to the focus areas, meaning that they directly addressed training, migration, and the green energy and refurbishment sector. They also had to be well-documented and structured, ensuring that the processes and outcomes were clearly outlined. Moreover, the practices needed to be transferable, meaning that they could be replicated in different contexts or regions, making them scalable and adaptable to diverse settings. Lastly, they had to be aligned with the POWGEN project's priorities, ensuring that they contributed to the broader goals of reducing the gender gap and fostering inclusivity in the green energy sector (Table 1).

STRUCTURED AND RELEVANT



- The GP achieves the objectives through validation and evaluation of its process and results.
- The GP preferably, since relevant to all three pillars, intersects labour inclusion of Third Country Nationals, in the refurbishment and renewable energy (REs) sectors.
- The GP fosters the participation of stakeholders and targets.
- The GP has an impact on migrant women.

EFFICIENT



- The GP ensures an adequate use of resources in implementing the sets of tasks and procedures.
- The GP's Partnerships set-up, distribution of roles, management and decision-making process is outlined and ensures good governance.

TRANSFERABLE



- The GP can be replicated in other contexts.
- The GP processes necessary for transferability.
- The GP identifies risks and mitigation possibilities in transferring the practice.

ALIGNED WITH OUTLINED PRIORITIES



- The GP contributes to the implementation of European, national and local action plans coherent with the priorities outlined in the POWGEN project.
- The GP has a positive impact on the local decision-making system
- The GP has a long-term impact on supporting disadvantaged contexts.

Table 1: Criteria for the selection



It is important to acknowledge that some of the good practices identified herein, may not fully meet all eligibility criteria outlined in the table above. This is mainly due to their early stages of implementation, which limits the scope of measurable impacts currently achievable. However, the practices are still highly valuable as they offer preliminary insights and shed light on the key lessons learnt so far. Here are the primary reasons for including these practices despite partial alignment with the criteria:

- Many training and inclusion programs or initiatives, particularly those targeting migrant women, require time to produce tangible results as participants gradually build skills, overcome language barriers, and adapt to the labour market.
- These practices address complex, intersectional issues that cannot be resolved quickly, requiring a long-term approach to foster meaningful change. The evolving nature of the green energy and refurbishment sector also adds uncertainty, as new opportunities and roles continue to emerge. Thus, while measurable impact may be limited at this stage, the success of these initiatives will become clearer over time as the programs and their participants mature.

The following section includes a table that illustrates how good practices have been addressed regarding the three pillars, with each initiative's most relevant pillar highlighted in either red or green. The final good practices are marked in bold, as these are initiatives that either meet all three pillars or excel in two, offering valuable expertise in a specific area. These selected good practices are additionally analysed in detail through a dedicated infographic, providing deeper insights for future POWGEN initiatives.

Cases selection

The following table showcases the initial 15 initiatives pre-selected according to their alignment with the three key pillars. After a thorough assessment of each practice and its relevance to these pillars, a final selection of 10 good practices was made. As shown below, practices that have been selected are marked in bold and have all pillars coloured in green, indicating they meet all essential features and criteria. For a practice to be selected, it was important that:

- It targeted people in context of migration and ideally women;
- Had an extensive training that fostered access to the labour market;
- And focused on integrating participants in the renewable energy and refurbishment sectors.

Practices meeting all these criteria were deemed eligible for selection. However, two initiatives were included despite aligning with only two of the three pillars. These projects were chosen due to their valuable insights into renewable energy jobs and women's participation. Gender considerations were essential when targeting migrant people, though not all practices specifically targeted women. This is why Mums @ Work project was included: while not operating within the renewable energy sector, it exclusively targeted women and supported their inclusion into the labour market specifically addressing barriers. While the Achieve project, another selected practice, did not specifically target migrant people, some of its energy advisors were individuals at higher risk of social exclusion, including foreign-born nationals, and individuals born in the UK with migrant background parents and or families. As one of the first projects addressing energy poverty, Achieve played a pioneering role in tackling social issues within the energy sector, making it a valuable model for informing future initiatives.



As outlined in the introduction, some of the selected good practices operate or have been deployed across multiple pilot locations in Europe and with reference to the national context section, the country of the project coordinator has been considered. Geographically, efforts have been made to cover the entire EU. However, it has been noted that there are few experiences across the EU (i.e. mostly EU funded projects) that address all three pillars in an integrated manner. This may be because some projects are known only at a local level and therefore are not available in English. Consequently, the report highlights those considered most relevant, either due to their international reach or because partners were able to find and analyse them. Although most of the good practices are based within the EU, two are pan-European initiatives (implemented in the UK and Switzerland) and were included due to the valuable lessons they offer. These good practices typically combine public funding, sourced either from local public administrations or the European Commission, alongside private funding that arises from collaborations among diverse stakeholders. Some of these good practices have concluded, while others, such as Energy Advising Centres and Idària are still ongoing. In these cases, as previously mentioned, the practices emphasise the lessons learned to date, with the hope that these insights can guide the development and implementation of future initiatives.

In this regard, this report seeks to bridge an important knowledge gap by identifying and examining projects and initiatives that promote the labour market inclusion of TCNs within the energy sector, especially in the growing fields of renewable energy and refurbishment. This compilation serves not only as a resource for understanding existing efforts but also as a foundation for developing future initiatives that address the unique needs of migrant communities in the context of sustainable energy transition.



N°	Initiatives / Projects	1st PILLAR Migration	2nd PILLAR Training	3rd PILLAR REs & refurbishment sector
1	Achieve		√	✓
2	Energy Advising Centers (EACs) (Punts d'Assessorament Energetics)	✓	√	√
3	Green Skills and Jobs		✓	✓
4	ldària	√	✓	✓
5	Joint protocol between the Italian government and the building sector	✓	✓	√
6	Mums @ work - Supporting Migrant Mothers Labour Market Integration	√	√	
7	Refugees go Solar+	✓	✓	✓
8	Renovating Energies (Renovant Energies)	√		✓
9	SolarBau24	✓	✓	✓
10	Solar Generation (Generación Solar)	✓	✓	✓
11	Start in the profession (Start in den Beruf)		√	
12	STEAMigPOWER	✓	✓	√
13	Women Generation (Generació Dones)	✓		√
14	Women love buildings (Frau Liebt Bau)			✓
15	WOMEN4GREEN	✓	✓	√

Table 2: Pre-selection of initiatives that match with POWGEN criteria of good practices





Overview and infographics of the good practices

This section provides a concise overview of the selected good practices, highlighting the essential elements of each and demonstrating how they integrate and reinforce the three foundational pillars. Each practice is examined to showcase the core strategies contributing to its effectiveness across these pillars. Following this summary, an informative infographic will provide a visual synthesis of the main highlights, including target outcomes, objectives, and actions, to clarify their unique strengths and illustrate how they collectively support the sector's broader goals. This approach aims to provide a clear, structured view of the practices, illustrating their impact and potential for replication in similar initiatives.

1. ACHIEVE

Pillar 1 - Migration

Was the practice successful from the point of view of migration?

- Achieve was an initiative that, while not specifically targeting migrant groups, focused on longterm unemployed individuals, thereby supporting social reintegration. Although the exact number of participants with migrant backgrounds is not available, some of the advisors were of foreign origin but held nationality within the country.
- The project had a dual impact: it empowered households to combat energy poverty and simultaneously enabled long-term unemployed individuals to gain skills as energy advisors, facilitating their reintegration into the labour market

Pillar 2 - Access to the labour Market

Were there measures put in place to promote fair wages, non-discriminatory practices, equal and safe working conditions, and opportunities for career advancement within these sectors? If yes, which ones?

- Limited information is available on specific measures implemented within Achieve to promote
 certain employment conditions. However, job agencies were consulted in recruiting advisors, and
 these agencies generally maintain standards such as non-discriminatory practices and safe, equal
 working conditions.
- The project also provided career advancement opportunities, with 50% of participants securing employment after completing the project, thanks to the training they received.
- Numerous stakeholders were actively involved throughout the process, contributing to the training sessions and home visits. Social workers were even brought in to assist households requiring additional support.

How was the practise successful from the point of view of access to the labour market?

- Around 50% of participants secured employment following ACHIEVE, while those who did not, continued with further training.
- In total, 142 individuals were trained through the programme, including 89 students and 49 volunteers or long-term unemployed individuals.



Pillar 3 - REs and Refurbishment Sector

Was the practice successful from the point of view of the REs sector?

- In 2011, fuel poverty was not widely recognised as a social issue within local municipalities. The
 project was groundbreaking at that time, casting light on energy poverty as a generalised
 problem in the UK.
- The project proved successful by helping reduce energy bills and CO₂ emissions, thus lessening environmental impact. Through home visits, households achieved savings of €150 and a reduction of 320 kg of CO₂ per year, per household.

How did the initiative address the specific needs and challenges faced by TCNs, specifically women, in accessing and participating in the labour market?

• It provided specialised training to participants. Given the profile of the individuals recruited, it can be assumed that language barriers were not an issue.

ACHIEVE

It is one of the first projects tackling fuel poverty in Europe (later defined as energy poverty). It can be understood as the baseline to understand how energy poverty has evolved since 2011.

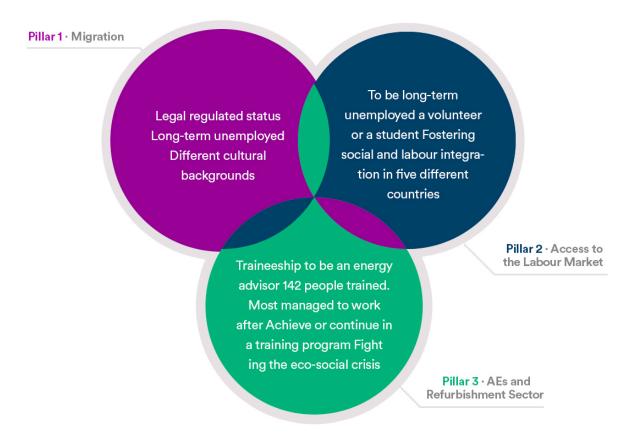
KEY FACTORS

- Targeted unemployed individuals and those from socially marginalised backgrounds.
- It offered specialised training to participants, preparing them to become energy advisors. This
 included a traineeship component involving home visits, where participants could apply their
 knowledge in real-world settings as energy advisors.
- Prioritised social reintegration: the project supported vulnerable households by equipping
 them with knowledge on energy poverty and practical energy-saving tips through home visits,
 while also empowering long-term unemployed individuals by providing them with
 employment opportunities. This dual approach promoted reintegration into the labour market
 and the broader social community for those involved.





This initiative demonstrates the interconnection of the three pillars. Herein the migration pillar is the least emphasised, as the project did not specifically target migrant people. However, it can be assumed that some of the long-term unemployed participants likely had migrant backgrounds.



OVERVIEW

The premise:

The main aim of the <u>ACHIEVE</u> project was to tackle **energy poverty,** by equipping vulnerable households with knowledge about energy efficiency. This was accomplished through home visits conducted by long-term unemployed individuals who were trained to become energy advisors. The key objectives included:

- Improving the identification of households experiencing energy poverty.
- Connecting local actors (such as social and health workers, social landlords, and energy suppliers) in a coordinated European effort to combat energy poverty, fostering common understanding, communication, and networking.

Main challenges faced:

- A general lack of awareness about energy poverty within social services and among users in vulnerable situations.
- A gap in communication skills necessary to provide energy advice in an accessible, easy-tounderstand manner.



Achieve

2022 - 2024



Funding:

EC Energy Intelligent Europe programme Grant: 1,467,611 euros (67% EC funded)



France, UK, Slovenia, Germany and Bulgaria



Implementing partners: 7 NGOs

In France: CLER (coordinator), Croix-Rouge Insertion-IDEMU and GERES. In the UK: Severn Wye Energy Agency. In Slovenia: Focus, Association for Sustainable Development. In Germany: CARITAS Frankfurt and in Bulgaria: Energy Agency of Plovdiv

Local stakeholders: municipalities and local authorities distributing aid to low-income households, job centres, people working in the health, social and energy sector, social landlords (who are agents providing social housing), and vulnerable households.

TARGET GROUP

- Long-term unemployed people, volunteers or students who were trained to be energy advisors and perform house visits.
- Vulnerable households in a situation of poverty and facing fuel poverty. They managed to reduce energy bills and foster energy efficiency.

MAIN ACTIONS

- 50h training to become energy advisors.
- 60-90 min household visits twice during the project.
- Highlight: First project to develop the brand-new methodology (at that time) of households' visits.
 Throughout Europe, energy advisors visited vulnerable households to mitigate energy poverty.

RESULTS & IMPACTS

- 142 people received the training and benefited from Achieve. 89 were students and 49 were volunteers or long term unemployed.
- 1,920 households were visited and assisted in reducing fuel poverty.
- Households' visits generated a saving of €150 and 320 kg of CO2/year per household.
- 50% of energy advisors found a job by the end of their participation in Achieve. The rest went back to the training course.
- Introducing young people to the labour market.
- **Highlight:** ACHIEVE was a catalyst for cooperation among social, environmental, educational departments, tackling for the first time fuel poverty, a topic that had never been considered before at the municipal level.

SUCCESS FACTORS

- European project providing funding and cooperation among partners.
- Linking together, in a common action, local stakeholders that were originally dispersed in the territory, especially for a problem like fuel poverty.
- Involve stakeholders from the early stage
- Moreover, the training gave people who were long-term unemployed the opportunity to receive an education which, in the end, could help them to find a job.
- Without the financial support, the practice could not have been successful, mainly because all the staff costs for undertaking the training and house visits could not have been possible.
- According to the project, an evaluation survey amongst households who received a visit showed a
 very high level of satisfaction regarding the service. The most important achievement was to have
 effectively brought savings to people in difficult financial situations, as well as providing them with
 energy efficiency solutions.

SUSTAINABILITY AND TRANSFE-RABILITY

- France: Achieve methodology replicated by the General Directorate for Energy and Climate of the Environment Ministry in the SLIME program.
- Since 2006, the Ministry of Energy has issued **white certificates** to finance large initiatives focused on reducing energy consumption in the country. It allows the local authority to recover a minimum of 44% of their local scheme budget.
- In 2016, around 20 local authorities joined this national program.
- Germany: Cariteam-Energiespar service and Stromspar-check projects, (basis for ACHIEVE methodology) are still ongoing.
- Sister project in the Balkans named REACH.

LESSONS LEARNT (POSITIVE AND NEGATIVE)

- Participants did not receive an official training to work in the energy sector in general, although they gained knowledge on energy efficiency in households. This led to particular difficulties in accessing the external labour market outside Achieve.
- All participants had to be in a regular status and registered in the municipality.
- It was proven that with dedicated training, most of the participants managed to find a job once the practice finished.
- Local networks are crucial to implement the project and assure its success.
- Budget is needed for success.

2. EACs - Energy Advising Centres

Pillar 1 - Migration

Was the practice successful from the point of view of migration?

- The practice successfully facilitated the inclusion of both Spanish and migrant women, particularly from Latin America, into the local labour market. It focused on supporting adults, with a median age of 49, recognising the specific challenges this age group faces in securing employment.
- When the EACs began in 2017, the initiative did not specifically target women; however, over
 time, it became especially focused on migrant women. By 2023, 64% of beneficiaries were
 women, and 33% were men, with 45% of all participants born outside of Spain. Most EAC
 workers had completed mandatory education or had partially completed higher studies in their
 home countries.

Pillar 2 - Access to the labour Market

Were there measures put in place to promote fair wages, non-discriminatory practices, equal and safe working conditions, and opportunities for career advancement within these sectors? If yes, which ones?

- One of the initial stages of the training includes an occupational risk prevention course to ensure safe working conditions.
- The values of the organisations involved support internal policies that uphold non-discriminatory practices and include a gender equality plan.
- Employment contracts and wages are governed by the collective bargaining agreement, ensuring fair and regulated pay.
- Additionally, the social component of the training covers topics on labour inclusion, gender perspective, racism, and diversity, reinforcing a socially inclusive approach throughout the process.

Was the practice successful from the point of view of access to the labour market?

- From 2017 to 2023 (ongoing), 135 individuals participated in the EAC initiative, with 74% of women securing employment after completing their internships.
- The programme provides 265 hours of training over eight weeks, emphasising practical
 experience through internships where participants can apply their skills. It's worth noting that
 EAC participants hold regular legal status and have prior experience in the labour market but
 were in long-term unemployment before joining.



Pillar 3 - REs and Refurbishment Sector

Was the practice successful from the point of view of the REs sector?

• EAC has proven effective as it enables TCNs to support citizens in vulnerable situations in mitigating energy poverty and increasing awareness of energy rights (for example, assisting those in need to apply for social bonuses and other support schemes). This provides migrant women with an opportunity to assist others in need, while the role of energy advisor successfully combines energy expertise with pathways to labour inclusion.

How did the initiative ensure equal access to employment opportunities to TCNs, specifically women, in accessing and participating in the labour market?

- Access to the initiative is limited to those enrolled in the Làbora programme, a selective jobmatching programme that prioritises individuals in long-term unemployment and with registered residency in Barcelona.
- The working contract offers 35 hours per week with flexible scheduling options. For example, participants can work only mornings (8:00-15:00) to support family needs and work-life balance, particularly beneficial for women who may need afternoons at home for family responsibilities.

EAGS

Pioneer in tackling energy poverty in Spain through an innovative methodology.

KEY FACTORS

- Targeted people in vulnerable situations and migrant groups experiencing long-term unemployment, with a particular focus on women.
- Provided a comprehensive 265-hour training over eight weeks to prepare participants as energy advisors, combining classroom training with practical traineeship through household visits.
 Participants were required to have regular legal status.
- Secured public funding of €4 million to support the project's implementation.
- Achieved a two-fold impact:
 - o Supported affected households in reducing energy poverty.
 - It offered long-term unemployed and vulnerable women employment for a minimum of one year.





The following figure illustrates how the three pillars are interconnected. In this good practice, all three pillars are successfully integrated, achieving a balanced impact across each. EAC was selected as a good practice due to its fulfilment of the three pillar objectives: supporting migrant inclusion, providing a labour insertion programme that facilitates access to the job market, and prioritising the energy sector over others. This focus aligns with current needs in renewable energy, addressing climate change, and reducing reliance on fossil fuels.



OVERVIEW

The premise:

The main aim of EAC is to train long-term unemployed individuals facing vulnerability to work as energy advisors. This practice has been in place since 2017 and has increasingly focused on migrant women, who now represent 70% of its workforce. The methodology involves conducting household visits with the goals of:

- Mitigating energy poverty in vulnerable households.
- Enabling women who are long-term unemployed and in vulnerable situations to become energy advisors through a dedicated traineeship lasting over two months.

Main challenges:

- Managing participants' expectations around securing employment post-EAC, although 74% have achieved this.
- Facilitating the entry of women, especially those with migrant backgrounds, into the field of energy poverty.

EACs - Energy Advising Centers

2017 – ongoing



Funding:
Public Bid from Barcelona City Council
with 4.450.380€ (period 2017-2024)



Spain, Barcelona. 12 offices distributed in different neighbourhoods



Implementing partners (non-for-profit organisations)

ABD-FABD-Ecoserveis

Suara and CiV

Involved actors: the communal ecosystem in each neighbourhood.

TARGET GROUP

- The programme targeted 20 beneficiaries per year (including vulnerable and long-term unemployed people) through a local employment scheme (Làbora program). Key requirements included being officially registered in the Barcelona census, holding a high school diploma and possessing a vocational training qualification.
- Most beneficiaries were women from Latin America and Spain, with an average age of 51. Nearly
 half of them (46%) were in a situation of long-term unemployment. In the latest edition (2023-2024),
 the majority of participants had completed mandatory education or had partially completed higher
 education studies abroad.
- Across the seven editions, women comprised 70% of the total beneficiaries, while men accounted for 30%.

MAIN ACTIONS

- 204 hours dedicated to energy training and social issues.
- The remaining 61 hours were allocated to technical training at one of the EAC stations.

RESULTS & IMPACTS

- Positive impact. As of today, 135 people have benefited from EAC.
- Of those employed, 74% successfully found a job afterwards (in EAC or somewhere else). Those who did not, could receive unemployment benefits.
- Promoted diversity, inclusion and gender equality in the energy labour market, with a special emphasis on migrant women.
- Individuals who had been unemployed for a year or more (46% were long-term unemployed) joined the programme, receiving a one-year employment contract that included comprehensive training and a 10-month traineeship.
- Participants gained training not only in energy but also in transferable skills applicable across various sectors
- This practice has a strong impact on labour inclusion due to its social perspective and on the renewable energy sector due to the role itself, as an energy advisor.

Highlight: EAC is a successful initiative, both in providing employment to long-term unemployed individuals and in supporting vulnerable households to mitigate energy poverty. According to evaluation surveys, participants rated the EAC service highly, with an average satisfaction score of 9.1.

SUCCESS FACTORS

- A public bid enabled this practice to take place, supported by the Làbora program, which supplied for the EACs.
- 4 million euros invested for training, traineeship and the long-term sustainability of the practice.
- EAC successfully addressed **two needs**: supporting citizens experiencing energy poverty to reduce their vulnerability and integrating socially vulnerable women into the labour market.

SUSTAINABILITY AND TRANSFE-RABILITY

How is the practice sustainable?

• The initiative that is conceived as social service, began as a pilot project in 2016 and was established as an ongoing service in 2017. It is currently secured to continue until 2027.

LESSONS LEARNT (POSITIVE AND NEGATIVE)

- Participants were trained to become energy advisors for EAC; however, they did not receive any official certification to work in the energy sector, as energy training is not formally recognized in Spain.
- Initial requirements for joining EAC included a vocational training qualification and a high school diploma, which can be challenging for migrant women to meet.
- In compliance with Spanish legal requirements, all participants needed to hold a residence permit and be registered in Barcelona.
- It was demonstrated that with dedicated training and a structured traineeship, most participants successfully secured employment once the programme concluded.
- Initially, the job duration at EAC was eight months, meaning employees were not eligible for unemployment benefits when the programme ended. The coordinating body extended this to 10 months, enabling participants to qualify for unemployment benefits. The programme as a whole significantly improved their employment prospects.

3. IDÀRIA

Pillar 1 - Migration

Was the practice successful from the point of view of migration?

- The practice directly targets migrant people as beneficiaries.
- However, it does not directly target migrant women and there are no specific policies to assist
 migrant women in the labour market (childcare, language services, etc.), but they have a
 balancing and social benefits plan.
- Key elements that make this practice successful in terms of migration are valuing inclusion into the community, strengthening social inclusion, access to the labour market and administrative regularisation through public employment plans, education and training, gender and racial equality measures.

Pillar 2 - Access to the labour Market

Were there measures put in place to promote fair wages, non-discriminatory practices, equal and safe working conditions, and opportunities for career advancement within these sectors? If yes, which ones?

- The practice does not specifically target women; however, women are included in the participant population, promoting equal conditions and non-discriminatory practices.
- To support gender equality, an Equality Commission convenes quarterly.
- A Gender Equality Plan has been developed with objectives to: regularly update the plan as needed, inform the workforce about equality issues, gather workforce feedback, prepare gender equality reports and recommendations, and address topics such as equal pay, staff representation, and anti-sexual harassment initiatives.
- Additionally, numerous anti-discrimination employment policies are outlined on their website as part of the organisation's core values.

Was the practice successful from the point of view of access to the labour market?

• It guarantees access to the labour market by supporting people in finding a job placement after the completion of the training.

Pillar 3 - REs and Refurbishment Sector

Was the practice successful from the point of view of the REs sector?

 The practice minimises the environmental impact by training individuals to work in the green energy sector, doing assembly and maintenance/cleaning of industrial solar panels beyond just installation.

How did the initiative address the specific needs and challenges faced by TCNs, specifically women, in accessing and participating in the labour market?

 The practice had a focus on migrant population and took women into account, but no further explanations were given regarding the materialisation of this specific focus.





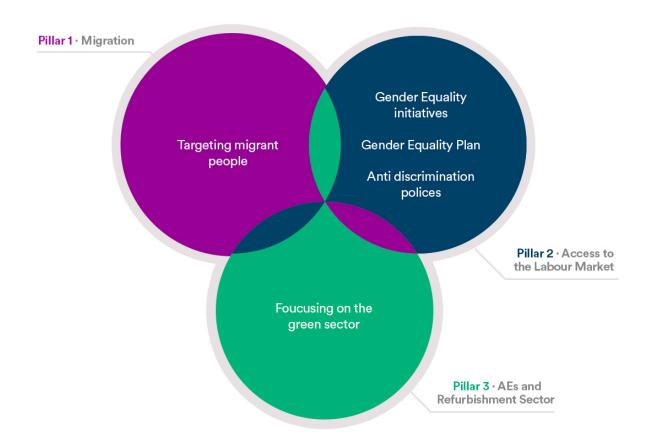
IDÀRIA

Combines the use of traditional jobs, circular economy, innovation, use of natural resources, training and insertion support. The project developed practical training in photovoltaic panels installation and then supported beneficiaries in job search.

KEY FACTORS

- Support focused on the person from community action.
- Have the necessary resources to guarantee a quality public service.
- Exercise advocacy to guarantee compliance with rights.
- Putting innovation and technology at the service of continuous improvement.
- Design and carry out the necessary process to develop professionals.

The three pillars can be considered as strong in Idària. The practice demonstrates a clear commitment to the labour inclusion of migrant people, grounded in anti-discriminatory and anti-racist values. It is focused on creating jobs in the green energy sector through a social economy approach. Additionally, it offers comprehensive training and skill development, enhancing long-term employability and fostering sustainable career opportunities for participants. Although Idària has put measures in place, such as an equality plan, ensuring women's participation has been and continues to be a challenge, as the sector is still predominantly male-dominated.





OVERVIEW

The premise:

IDARIA, a cooperative founded on social and solidarity economy principles and an anti-racist framework, started 12 years ago by supporting women working in the informal economy in rural areas, focusing particularly on migrant women without work permits. Initially, it developed a labour cooperative within the forestry sector, though it faced difficulties competing with larger companies that could provide higher wages and improved working conditions. Consequently, the cooperative closed this sector and conducted a study to identify new opportunities. Three years ago, IDARIA transitioned to the renewable energy sector, where they currently employ 36 workers.



Idària

2012 – on going



Funding: co-financed by the European Union, the Government of Catalonia (Generalitat de Catalunya) and the Employment Service of Catalonia (Servei d'Ocupació de Catalunya). And received the support of the Waste Agency of Catalonia and the Department of Climate Action, Food and Rural Agenda





Implementing partners: IDÀRIA is the implementing organisation, working for 12 years as a labour cooperative and working with multiple stakeholders, both public and private

Stakeholders: NGO's, and private clients who buy services of photovoltaic installation. On the other hand, also counts with the support of several municipalities, such as the City Councils of Palamós, Palafrugell, Mataró, Llagostera, Caldes de Malavella, Cassà de la Selva, Santa Cristina d'Aro, the County Counsel of La Selva and the Consortium of Les Gavarres.

TARGET GROUP

People with migrant background, young people in vulnerable situations who have been under guardianship of Generalitat de Catalunya, individuals with special needs;

MAIN ACTIONS

- Expanding renewable energy sector through assembly of solar panels
- Providing training and job placements, supporting individuals in achieving legal documentation and regular employment status.
- Promoting solidarity economy values through cooperative structures.
- Establishing safe, supportive environments for populations in vulnerable situations.
- Offering mental health guidance for young people.
- · Educating communities on conservation efforts.
- Creating safe spaces for reporting discrimination and fostering inclusive work environments.

RESULTS & IMPACTS

- Short-term impact: Measured by the number of professionals trained—67 professionals were trained during 2023.
- Long-term impact: Although it is still not possible to measure the long-term impact, 149 professionals (37 women and 112 men) have been trained since 2019. Furthermore, at least 26 people out of the 149 participated in programs to foster the inclusion of migrant people and youth (ACOL and Treball i Formació Joves).

SUCCESS FACTORS

- Sector regulation: establishing standards and guidelines within the sector.
- Professional demand: addressing the need for skilled professionals in this sector.
- Economic support: providing financial assistance for migrant people to pursue training.
- Administrative regularisation: facilitating the regularisation of migrant people with employment contracts included in public employment plans.
- Streamlined bureaucracy: implementing flexible and simplified bureaucratic processes to ensure efficiency.

SUSTAINABILITY AND TRANSFE-RABILITY

- Environmental: the practice focuses on creating jobs in the green energy sector, such as solar panel installation and upkeep
- Social: the practice functions as a labour insertion coop, which aims to create lasting skills and job opportunities for those involved, not just short-term assistance.
- Economic: creating new job opportunities

LESSONS LEARNT (POSITIVE AND NEGATIVE)

• Low Female Interest: Primarily due to the sector's masculinisation and historically unhealthy working environments. Emphasis is needed on raising awareness about gender inequality, preventing harassment, creating balanced gender representation, and enforcing a zero-tolerance policy for sexist comments or attitudes in all the RES sector.

4. JOINT PROTOCOL BETWEEN THE ITALIAN GOVERNMENT AND THE BUILDING SECTOR

Pillar 1 - Migration

Was the practice successful from the point of view of migration?

 The practice is directly targeting Asylum seekers or refugees (or otherwise people in vulnerable situations) hosted in the SAI network (unaccompanied foreign minors - children and young people- or newly of age included). It aims to support the matching of demand for low skilled jobs in the refurbishment sector with the labour market inclusion of migrant people exiting the reception system.

Pillar 2 - Access to the labour Market

Were there measures put in place to promote fair wages, non-discriminatory practices, equal and safe working conditions, and opportunities for career advancement within these sectors? If yes, which ones?

 Having the most representative trade unions at the national level signing the protocol and Formedil as the joint body responsible for the training, should be a guarantee of compliance with the national requirements and legislation.

How was the practise successful from the point of view of access to the labour market?

• Through training and internship in a market that really needs a labour force.

Pillar 3 - REs and Refurbishment Sector

How was the practice successful from the point of view of the REs sector?

- The Building Refurbishment sector is booming and offering good opportunities for unemployed people to get a job. The expansion of the market is led by the Italian government through means of incentives, funds directed at achieving an improved energetic efficiency of the buildings, reduction of waste and pollution.
- The practice can be successful because workers can be trained in specific new jobs.
- The protocol should target TCNs; training them will increase the possibility for them to access to the labour market and therefore to reduce inequality

How did the initiative/project/institution/company address the specific needs and challenges faced by TCNs specifically women in accessing and participating in the labour market?

- The project is targeting migrant people in vulnerable situations for which the government is
 providing support. To offer specialised training is thought as a way to speed up their autonomy
 and create conditions for them to exit assistance projects they are in.
- The practice was not directly targeting migrant women.





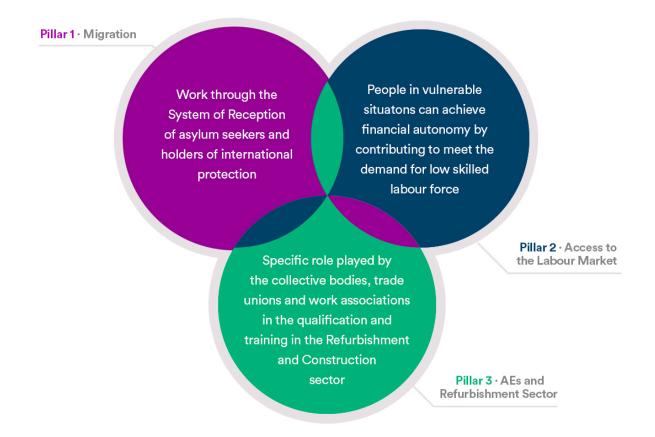
JOINT PROTOCOL

It is a multi-stakeholders project that involves central and local government, reaching out to Rete SAI migrant people in situations of vulnerability. It favours the matching of supply and demand by combining companies' need for skilled labour with the economic autonomy of migrant people, through qualified training and job opportunities.

KEY FACTORS

- Focused on vulnerable TCNs.
- Provided specific training to meet the demand for low skilled jobs in the REs and construction sector. The process includes the Reception System for Asylum seekers and requires the direct involvement of the local government.
- The main objectives are economic integration of migrant people and answering the need of a new market in expansion.

Here it can be appreciated that the three pillars intertwined. For this good practice, all three pillars are relevant:





OVERVIEW

The premise:

The Italian Government - in compliance with the EU Green Deal - decided to invest in building and green industries. As the funds were released and the companies started to work, new skilled labour was needed. In the meantime, the flow of asylum seekers from non-European countries had increased again. The joint protocol intended to promote the social and work integration for vulnerable people: refugees and asylum seekers applicants, holders of international protection and other foreign citizens in vulnerable conditions.

Main challenge:

Favouring the matching of supply and demand by combining companies' need for skilled labour with the economic autonomy of Rete SAI migrant people, through qualified training and job opportunities.



Joint protocol between the Italian government and the building sector

2022 - 2025



Funding

Italian government through PNRR fund (as stated in the protocol); any funds available Grant



Italy

Implementing partners: 7 NGOs



FORMEDIL, a single training and safety body, with the purpose of the promotion, implementation and coordination on a national scale of training, safety, qualification and professional requalification initiatives in the construction sector, through its territorial network

Italian Government through Ministry of the Interior and Ministry of Labour and Local Prefecture; Social Parties; Italian Municipalities; Asylum Network (Rete SAI); UNHCR; Ance - National Building contractor association

TARGET GROUP

• The project is targeting at least 3,000 migrant people in vulnerable situations for which the government is providing support. To offer specialised training is thought as a way to speed up migrant people's autonomy and create conditions for migrant people to exit assistance projects they are in. In the construction sector, foreign labour represents over 17% of employed people, a much higher incidence than the average of 10% of foreigners employed in Italy. A noticeable 21% of migrant entrepreneurs are active in construction, in most cases having been employees themselves.

MAIN ACTIONS

- · Promotion of the memorandum of understanding at local level.
- Creation of ad hoc memoranda of understanding between Formedil and third sector entities dealing with migration and the SAI network.
- · Recruitment of participants.
- Recruitment of companies.
- Course on safety in construction sites.
- Professionalizing course.
- Internship.

RESULTS & IMPACTS

• No data available yet as it is still an ongoing project.

SUCCESS FACTORS

 Although it is still ongoing, the success of the initiative can be found in bringing together different stakeholders to ensure that political priorities of the central government sustain the achievement of the set goals at an European level can be achieved by matching the high demand for labour force from construction companies with the labour inclusion of migrant people.

SUSTAINABILITY AND TRANSFE-RABILITY

- It's sustainable because it works in a system with structural funds for the SAI network, it involves all
 the public bodies connected with migration issues and the productive system has great demand for
 the workforce. Protocol and memorandum are important tools of collaboration in the case of less
 funds available.
- The practice is implemented at national and local level. Reception systems are different throughout Europe. Nevertheless, exploiting this channel to support effective labour market inclusion, is a win-win strategy for migrant people's autonomy, the economic sector and the implementation of green policies.

LESSONS LEARNT (POSITIVE AND NEGATIVE)

- High demand for labour force from construction companies.
- Political priorities of the central government sustaining the achievement of the set goals at an international, European level.

5. <u>Mums @ work - Supporting Migrant Mothers Labour</u> <u>Market Inclusion</u>

Pillar 1 - Migration

Was the practice successful from the point of view of migration?

 The initiative can be considered successful as it was directly targeting migrant mothers in vulnerable situations, focusing on improving their access to the labour market through personalised support, skills training, and work experience. The project is based on a specific and well-defined methodology of intervention with this specific target.

Pillar 2 - Access to the labour Market

Were there measures put in place to promote fair wages, non-discriminatory practices, equal and safe working conditions, and opportunities for career advancement within these sectors? If yes, which ones?

- At the beginning, an assessment of labour market integration of the involved migrant mothers
 was carried out by analysing their social integration and employment situation. This action then
 led to an individual tailor-made insertion itinerary that was outlined for each of them.
- Fair wages and non-discriminatory practices were promoted by collaborating with inclusive employers and providing essential support services like childcare. The initiative successfully facilitated labour market integration by offering job shadowing and practical experience.

How was the practise successful from the point of view of access to the labour market?

As with any activity involving this specific target, the practice faced challenges such as language
barriers and logistical issues related to transport and documentation / administrative situations
that can have a full impact on the success of labour integration on the women involved. The
practice was successful in guaranteeing the effective participation and access to the selected
employment opportunities.

Pillar 3 - REs and Refurbishment Sector

Was the practice successful from the point of view of the REs sector?

• The project was not directed at the REs sector.

How did the initiative ensure equal access to employment opportunities to TCNs, specifically women, in accessing and participating in the labour market?

 The specific needs and challenges faced by TCNs women were addressed through tailor-made insertion itineraries; individual and group counselling sessions; labour market orientation activities; job shadowing month; direct work experience and development of an individual road map (by setting the next steps towards their labour market integration after project end).





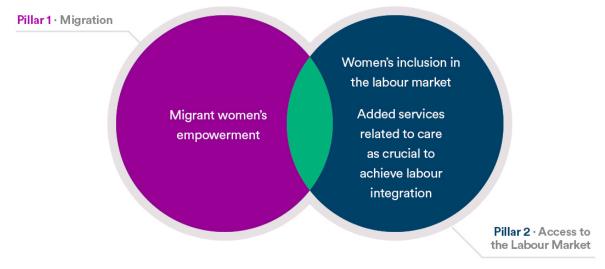
MUMS @ WORK

The main goal is to promote social and economic inclusion of Migrant Mothers (aged 25-45), by enhancing their today and tomorrow employability.

KEY FACTORS

- Focused on migrant women.
- Offering training in soft skills: orientation, counselling and training while providing added services as childcare.
- Public bid of 4 million throughout the project implementation
- Two-fold impact: 1. women's inclusion in the labour market. 2. Sensitise on the importance of added services related to care.

Here it can be appreciated that the three pillars are intertwined. For this good practice, the pillar of REs is the weakest one because the project was not directly involving the sector.



OVERVIEW

The premise:

The Mums @ Work project was designed to promote social and economic inclusion of migrant mothers by enhancing their employability, helping them find active roles in the society, and reducing their risk of social exclusion. The project focused on addressing the unique challenges faced by migrant women, particularly those who experience a "triple disadvantage" in terms of poorer health, lower education, and worse labour market outcomes compared to migrant men.

Main challenges:

Promoting the social and economic inclusion of migrant mothers aged 25-45. The project enhanced their employability, reducing their risk of social exclusion, preventing current poverty, and ensuring better retirement conditions.



Mums @ work - Supporting Migrant Mothers Labour Market Inclusion

Jan 2021 -July 2023



Funding: The project, financed by the

European Union Asylum, Migration and Integration Fund (AMIF)
Grant (total)
911.169,20 euro





Implementing partners: The project was coordinated by Pro Arbeit – Kreis Offenbach – (AöR) – Kommunales Jobcenter and implemented by Welfare and Development Association (ABD) Spain, SYNTHESIS Center for Research and Education, Cyprus; Vital Aid Foundation Netherland; Cidis Onlus Italy; Solution: Solidarité & Inclusion France; Réseau Européen des Femmes Migrantes Belgium.

TARGET GROUP

• The primary target beneficiaries of the Mums @ Work project were migrant mothers aged 25-45. The project supported 260 mothers. Additionally, the families of the migrant mother's experience improved living conditions as a result of the mothers' enhanced employability and social integration.

MAIN ACTIONS

- · Status Assessment and Profiling for designing personalised insertion itineraries.
- Recruitment of migrant mothers at risk of social exclusion. Strategic partners recruited to support and perform coaching and counselling activities and to engage employers.
- Individual and Group Counselling covering a wide range of topics.
- Group Activities: Practical Workshops and Activities to develop job skills like interviewing, resume writing, and networking.
- · Labour Market Orientation.
- Work Experience Opportunities with shadowing opportunities and months of job training tailored to each participant's interests and possibilities.
- Individual Road Maps outlining the steps towards labour market integration over six months.
- Celebration of International Mother's Day.
- Awareness Campaign at local, national, and international levels to raise awareness about the project, its goals, and the challenges faced by migrant mothers.

RESULTS & IMPACTS

Each partner provided 180 hours of capacity building sessions to the participating migrant mothers either in individual or group settings. All partners provided workshops on different topics, e.g. gender inequality and discrimination, work-life balance, rights and access to civic services, digital

- Matching days/sessions, where counsellors, migrant mothers (15 per country) and employers (5
 per country) meet and agree on duration and level of commitment and quality of work experience.
- Delivery of 105 (total) work experience opportunities involving 30 (total) employers and 105 migrant mothers (total).
- Development of an individual roadmap (total 90) for each migrant mother for the next steps towards the labour market integration.

SUCCESS FACTORS

• Lessons learned from the project highlight the importance of personalised support tailored to individual needs and the necessity for ongoing assistance beyond the project's duration.

SUSTAINABILITY AND TRANSFE-RABILITY

Institutionally, strong coordination among project partners and supportive policies are needed.
 Economically, adequate funding and resources, along with engagement from a diverse range of employers, are essential. Socially, a welcoming community, accessible childcare, and supportive social networks play a significant role. Environmentally, appropriate infrastructure and culturally sensitive services are required.

LESSONS LEARNT (POSITIVE AND NEGATIVE)

 Improvements could include expanding employer partnerships to provide more diverse work experiences, enhancing community outreach to foster greater acceptance.

6. Refugees go Solar+

Pillar 1 - Migration

Was the practice successful from the point of view of migration?

- The practice was successful in answering the challenges of vulnerable migrant people entering
 the job market. The education and financial independence helped strengthening social inclusion
 of migrant people, their self-esteem and in general integration into society. Most of these issues
 will be evaluated in the coming study.
- The training could end up having a relevance in terms of migrants being able to use acquired skills in their countries of origin.

Pillar 2 - Access to the labour Market

Were there measures put in place to promote fair wages, non-discriminatory practices, equal and safe working conditions, and opportunities for career advancement within these sectors? If yes, which ones?

• There were no specific gender indicators. Women were invited to participate, but as solar installation is heavy work, almost only men were willing to take part.

How was the practise successful from the point of view of access to the labour market?

- Wages for internships were fixed and during that time, the implementing partner was the
 employee. After the 2 months internship, companies hired the participants either with a fixed
 contract or on hourly basis. The contract conditions were for the companies to decide.
- Companies who agreed to have trainees, automatically also agreed to offer a job placement at the end of the internship if the participants gained a certain level of expertise (so called minimal criteria).
- Here it can be appreciated that the three pillars intertwined. For this good practice, all three pillars are relevant as following

Pillar 3 - REs and Refurbishment Sector

How was the practice successful from the point of view of the REs sector?

- Solafrica focuses on solar energy, the development of such initiatives, links together the RES sector and social one in a joint effort.
- Data on how many Mega Watt have been installed by participants, is not available hence the environmental impact cannot be reported.

How did the initiative/project/institution/company address the specific needs and challenges faced by TCNs specifically women in accessing and participating in the labour market?

• As mentioned, the program was not very attractive for women.

REFUGEES GO SOLAR +

Promotion and development of social and professional skills through practical work in the Swiss labour solar industry market.

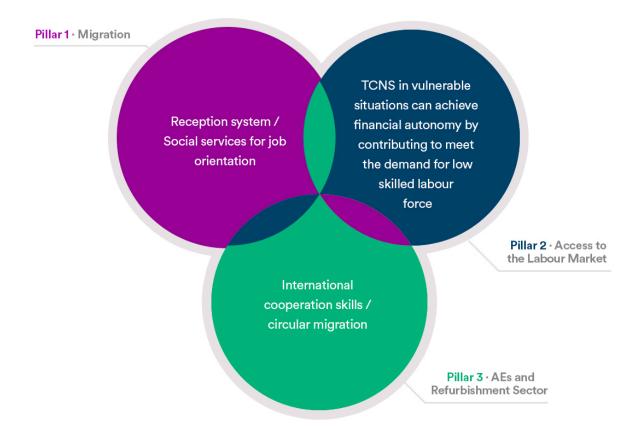




KEY FACTORS

- Focused on TCNs in vulnerable situations.
- Provided specific training to meet the demand for low skilled jobs in the REs and construction sector. The process includes the Reception System for Asylum seekers and requires the direct involvement of the local government.
- Main objectives: economic integration of migrant people and answering the need of a new market in expansion.

Here it can be appreciated that the three pillars are intertwined. For this good practice, all three pillars are relevant as following:



OVERVIEW

The premise:

Refugees and migrant people often face difficulties in entering the Swiss labour market. Either they were able to pursue little education, or their diplomas are not accepted. At the same time, the Swiss labour market lacks a workforce. In the solar sector, posts for solar technicians are constantly open. Solafrica is an NGO focusing on enhancing and improving solar energy, mainly in African countries. With this practice it brings its skills in working with migrant people in the local Swiss market, creating a win-win situation for the migrant population, the solar companies and the climate.

Refugees go Solar+

2020 - 2024



Different ministries and foundations Annual budget (2021 – 2023): 291'000



Implementing partners:



Solafrica is an independent Swiss non-profit organisation striving for the promotion of solar energy.

Root & Branch is a Swiss organisation that develops innovative qualification programs in professional sectors with a labour and skilled labour shortage. The organisation helps job seekers to obtain a non-formal educational qualification while simultaneously working in the primary labour market.

Stakeholders: Switzerland State Secretary of Migration, Ministry of Energy, Solar Companies, assigning bodies (social system)

TARGET GROUP

• First year, only refugees in the Swiss Asylum system were target beneficiaries. At a later stage, all unemployed people. Most of them received support from the social system, facing challenges to enter the labour market. Approximately 20 per year.

MAIN ACTIONS

- · Recruitment of participants.
- · 5-days course Acquisition of basic knowledge of solar technology and education on energy and
- Internship placement, negotiations with solar companies promotion and development of social and professional skills through practical work in the solar industry.
- Integration into the (solar) labour market step up from social welfare to financial independence.

RESULTS & IMPACTS

- 2021 attendance: The programme had 24 participants, resulting in 18 job placements. Similarly, in 2022, there were 17 job placements.
- 2023 attendance: A slight decrease in participants, with 11 attending and 7 achieving job placements.
- Approximately 70% successful job placements, with the programme undergoing annual evaluation
- · Long-term impact: Scheduled for evaluation in autumn 2024.

SUCCESS **FACTORS**

• Conditions to guarantee success are a willingness and openness by solar companies to train migrant people and include them and that participants have at least a Basic knowledge of German language.

AND TRANSFE-**RABILITY**

SUSTAINABILITY • Transferability is the plan for the coming phase. Solafrica aims to work on nation-wide structures and processes (formal education, qualification of non-formal education) with the respective actors to scale-up the program from 20 participants yearly to 200 yearly.

LESSONS LEARNT (POSITIVE AND **NEGATIVE**)

• The experience is part of a bigger project of an umbrella organisation Swissolar that is trying to establish a more formal and stronger certification of competences.

7. Solar Bau 24

Pillar 1 - Migration

Was the practice successful from the point of view of migration?

 This initiative proved effective by directly targeting migrant people, offering employment opportunities and hands-on training within the solar energy sector, thereby promoting integration and social inclusion. The practice does not specifically target migrant women.

Pillar 2 - Access to the labour Market

Were there measures put in place to promote fair wages, non-discriminatory practices, equal and safe working conditions, and opportunities for career advancement within these sectors? If yes, which ones?

 Measures were put in place to promote fair wages and non-discriminatory practices at SolarBau24. These include a commitment to merit-based hiring, the establishment of equal and safe working conditions, and the provision of hands-on training that encourages career advancement through skill development and support for personal growth.

How was the practise successful from the point of view of access to the labour market?

• The practice was successful in providing young migrant people and refugees with direct access to the labour market by offering hands-on training and employment opportunities within the solar energy sector. This approach not only equipped participants with valuable skills but also facilitated their integration into the workforce, thereby enhancing their employability and supporting their transition into stable, long-term employment.

Pillar 3 - REs and Refurbishment Sector

Was the practice successful from the point of view of the REs sector?

• The aim of this practice is to promote the occupation of migrant people in the renewable energy sector, leveraging the sector's high demand for labour and favouring the accessibility to individuals with varying qualifications. This approach not only supports environmental sustainability by promoting solar energy and reducing carbon emissions but also offers valuable job opportunities to migrant people, including potentially migrant women, in a supportive and culturally sensitive work environment.

How did the initiative address the specific needs and challenges faced by TCNs, specifically women, in accessing and participating in the labour market?

• The initiative ensures equal access to employment by focusing on merit-based hiring and providing practical training, though specific details on sponsorship or visa systems are not outlined. It addresses the needs of third-country nationals by offering hands-on training and accommodating cultural and religious practices. However, a key challenge is scaling the business while maintaining personalised support and managing the complexities of immigration and work authorization.





SOLARBAU

SolarBau24 fosters the inclusion of young migrant people and refugees into the labour market through practical training in solar panel installation, while simultaneously promoting environmental sustainability and providing ongoing employment support.

KEY FACTORS

- A personalised approach that prioritises the needs and backgrounds of individual employees.
- Hands-on training programs that enhance skill development and employability.
- A commitment to creating an inclusive and culturally sensitive work environment.
- Strong partnerships with local authorities and community organisations for support and resources.

In the following figure it can be seen how the three pillars intertwine, showing a clear balance among the three pillars.





OVERVIEW

The premise:

Solarbau starts from Rostam Nazari's journey, being an unaccompanied minor refugee. At the time of his arrival in 2015, when he was a teen, Germany was experiencing a significant influx of refugees and migrant people due to conflicts and instability in their home countries, including Afghanistan. The migrant situation in Marburg and more broadly in Germany included challenges such as inclusion into the local job market, language barriers, and risk of deportation. Many refugees faced difficulties in securing employment due to limited language skills and the unfamiliarity of their qualifications with local standards. The challenges included overcoming these barriers, addressing the language and skills gaps among migrant people, and finding stable employment opportunities for those who might otherwise struggle to be hired. Additionally, Nazari faced personal challenges, including the threat of deportation, which required legal assistance. His initiative also had to navigate the broader context of including refugees and migrant people into the workforce while simultaneously addressing the local demand for skilled labour in the solar energy sector.



Solar Bau 24

2023 – ongoing



Funding:

private funding and alongside potentially other resources available for entrepreneurial ventures and support for refugees.





Rostam Nazari and his friend David Szielenski co-founded the company "SolarBau24" in Marburg, Germany.

TARGET GROUP

Direct beneficiaries:

- Young migrant people and refugees who have similar backgrounds to Rostam Nazari.
- Employees of "SolarBau24"

Indirect beneficiaries:

· Local community in Marburg, which benefits from the solar installations provided by the company.

MAIN ACTIONS

- Practical training in the installation of solar photovoltaic panels.
- Facilitation of an inclusive work environment by conducting initial two-week internships to assess personal qualities and skills.
- Accompaniment on cultural and religious needs of their staff not solely focused on formal qualifications.

RESULTS & IMPACTS

14 employees currently working at solarbau24 from diverse backgrounds.

- Short-Term Impact: the practice provided immediate employment and training opportunities for young migrant people and refugees, enabling them to gain practical skills in the solar energy sector. It created a supportive work environment that accommodated their cultural and religious needs, which helped in their integration into the workforce. This approach also contributed to the local community by installing solar panels, thus promoting environmental sustainability.
- Long-term impact: the practice will contribute to the professional development of its employees, improving their
 employability and potentially leading to career advancement opportunities. The establishment of "SolarBau24" has
 also had a positive impact on the local labour market by addressing skills shortages and supporting environmental
 goals. The company's inclusive approach helps to set a precedent for integrating migrant people and refugees into
 the workforce, which can influence other businesses and practices.
- Negative Impact: challenges of scaling up the business while maintaining the same level of personalised support
 and training. Additionally, the practice might face difficulties in consistently meeting the diverse needs of a growing
 and varied workforce.
- The practice is impactful primarily in the areas of labour inclusion and environmental sustainability (RES)

SUCCESS FACTORS

The success of the practice relied on several essential conditions. Institutional support was crucial, including collaboration with local authorities and legal advisors to navigate bureaucratic challenges and ensure legal stability. Economic resources were needed for initial funding and operational stability, allowing for the establishment of "SolarBau24" and the investment in employee training. Social inclusivity played a significant role, with the company providing a supportive work environment that accommodated cultural and religious needs, fostering a positive workplace culture. Environmental awareness was also important, as the company's focus on renewable energy and sustainability aligned with broader environmental goals and enhanced its impact.

SUSTAINABILITY AND TRANSFE-RABILITY

- The business model supports economic sustainability by integrating young migrant people and refugees into the
 workforce, meeting local labour demands, and providing a steady stream of skilled workers for the renewable
 energy sector. By addressing both social and environmental goals, it attracts private and public funding aimed at
 social inclusion and sustainability.
- The practice creates an inclusive workplace that respects cultural and religious needs, enhancing employee
 satisfaction and retention. This supportive environment is essential for stability and commitment among employees,
 fostering long-term success. As the business grows, scalable processes that uphold these values will be necessary
 to maintain inclusivity.
- The model's approach to training and employment provides a scalable framework that can be replicated in other regions. For successful expansion, maintaining personal support and sensitivity to cultural needs is crucial. Implementing scalable structures, like mentorship programs, can help address this while enabling growth. This practice serves as a valuable model for economic and social sustainability, offering insights into balancing growth with a personalised approach in labour inclusion.

LESSONS LEARNT (POSITIVE AND NEGATIVE)

Lessons learned from the practice highlight the importance of personalised support and tailored training for
employees from diverse backgrounds, which significantly aids in their integration and job satisfaction. However,
maintaining this level of support can become challenging as the business grows, underscoring the need for scalable
systems and processes. Ensuring ongoing cultural sensitivity within the work environment is essential for employee
retention and satisfaction.



8. SOLAR GENERATION

Pillar 1 - Migration

Was the practice successful from the point of view of migration?

- The practice does not directly target migrant people, but more generally women at risk of social exclusion and/or in vulnerable situations.
- The initiative does not offer any support for migrant people in facilitating their access to the labour market or in helping them to adapt to the new environment.

Pillar 2 - Access to the labour Market

Were there measures put in place to promote fair wages, non-discriminatory practices, equal and safe working conditions, and opportunities for career advancement within these sectors? If yes, which ones?

- It directly targets women, therefore fostering gender equality.
- However, it does not specify any specific measures to help combat barriers for women in the workforce or for migrant people in the workforce (childcare, language skills, fair wages, etc.)

Was the practice successful from the point of view of access to the labour market?

 Job placement is a core element of the practice, encouraging women to be trained in photovoltaic solar panel installations in order to join the labour market. Currently, women hold only 12% of jobs in solar installation, so the initiative works to minimise this inequality by recruiting only women.

Pillar 3 - REs and Refurbishment Sector

Was the practice successful from the point of view of the REs sector?

Spain's photovoltaic energy sector has been increasing in recent years, with a growing demand
for professionals in this field, but a lack of supply too. Therefore, creating a clear path to jobs in
this sector will allow the industry to grow to its full potential, increasing the use of renewable
energy sources.

SOLAR GENERATION

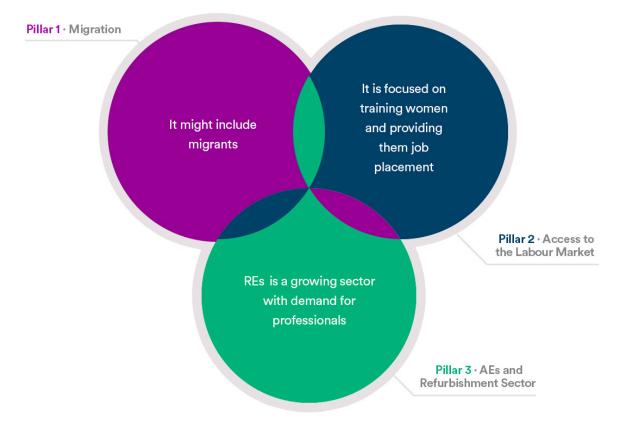
It is a training program in photovoltaic solar panel installations for people in vulnerable situations, with a focus on women. The program is committed to enhancing economic development, sustainability, and social inclusion. The training lasted for 3 months. The content of the training was not made public.

KEY FACTORS

- Help better understand the importance of photovoltaic solar energy nowadays and the needs of this growing industry.
- Increasing women's chances of success for their future work.
- The training program encourages participants to be agents of change, promoting talent and favouring sustainable employment.
- The initiative facilitates job placement for groups in vulnerable situations.



Only two of the three pillars are interconnected. This practice primarily targets women at risk of social exclusion, with the main objective of providing training for job placement in the photovoltaic industry. However, it does not specifically target migrant women, nor has it incorporated specific measures to address the challenges they may face.



OVERVIEW

The premise:

In an environment like the current one, in which the prices of traditional electricity have skyrocketed, consumers are increasingly turning their attention towards new sources of energy, such as photovoltaics, which is also characterised by its greater sustainability and respect for the environment. The figures show that the demand for qualified personnel in the solar energy sector is high and constantly growing. According to the vice president of the Spanish Photovoltaic Union (UNEF, there is a need for between 50,000 and 60,000 people to install solar panels and face the rise of self-consumption (El Diario, 2022). However, one of the challenges is the lack of specific training in this field. In this context, the promotion of technical training in future professions, such as the installation of these solar panels, has become an exceptional opportunity through which to access the labour market for all types of groups in vulnerable situations. One of these groups is women, who also still have little representation in solar panel installation work, where they represent only 12% of employment. Furthermore, the renewable energy sector in general offers more opportunities for women, compared to traditional energy. Thus, female employment in the renewable energy sector now reaches 32%, while in traditional energies they only represent 22% of the workforce.



Solar Generation

2023 - 2024



Funding:

award received from the 12th edition of the Orange Solidarity Awards in Climate Change category (30.000 euros)





Implementing partners: United Way, Spain.

Collaborators include: MFD (a training school in the sector), EMMA, Venezuela Code, Orange Foundation (provided digital centre), San Agustín de Guadalix City Council, Yingli Solar Company (provided facilities for classes)

TARGET GROUP

- Focused on women in vulnerable situations, not specifically targeting women with migrant background
- The requisites of access were being a woman, over 16 years old and having mandatory education

MAIN ACTIONS

- Provide free certificated training in solar installation and professional performance
- Facilitate job placement and increase chances of success in future work

EXPECTED RESULTS & IMPACTS

- The project is still ongoing. It addresses 15 beneficiaries.
- The project is still ongoing. No information on the short- or long-term impact

LESSONS LEARNT/ SUC-CESS FACTORS

- Lessons learned showed that economic support mechanisms for participants are crucial, especially if to ensure the equal participation of men and women. While the project aimed to support women, many were unable to complete the course due to family responsibilities (16 started, 2 finalised). A targeted approach to address these gender-specific challenges is essential for future projects.
- Transportation proved to be a major issue, as the distance to the course location was a significant challenge. Providing practical support such as transportation services (e.g., a bus service) could have made participation easier and more feasible for those living far away

SUSTAINABILITY AND TRANSFE-RABILITY

- SUSTAINABILITY Environmentally sustainable: creating jobs and investing in the renewable energy sector.
 - Socially sustainable: providing training that empowers participants and equips them to find employment and be self-sufficient
 - Economically sustainable: does not specify any steps taken to ensure this program can continue or expand beyond the initial award.
 - It has not been replicated yet. Replication would require identifying a similar network of partners to provide awards, facilities, etc. No more information available.



9. STEAMIGPOWER

Pillar 1 - Migration

Was the practice successful from the point of view of migration?

 The practice favours the inclusion of migrant women and pupils in upper secondary school in the local labour market of the partner countries and contributes to the future development of educational contents/courses to these target groups through the online platform.

Pillar 2 - Access to the labour Market

Were there measures put in place to promote fair wages, non-discriminatory practices, equal and safe working conditions, and opportunities for career advancement within these sectors? If yes, which ones?

 This practice is directly targeting migrant women and contributing in filling the gender gap in the labour market.

How was the practise successful from the point of view of access to the labour market?

 The practice promotes non-discriminatory practices by directing its action to a specific target group in vulnerable situations and by introducing internal practices to advance equal opportunities.

Pillar 3 - REs and Refurbishment Sector

How was the practice successful from the point of view of the REs sector?

- Refurbishment and REs sectors were picked as suitable for migrant inclusion in the labour market due to the European priorities and their home countries' needs in case of returning to their country of origin.
- The practice will contribute to mitigating energy poverty by providing courses related to climate change, eco-sustainable construction, sustainable and renewable energy and sustainable development topics.

How did the initiative/project/institution/company address the specific needs and challenges faced by TCNs specifically women in accessing and participating in the labour market?

 The practice provides migrant women with quality education and long-term and sustainable employment opportunities

STEAMIGPOWER

The project focuses on the development of the STEAM courses to be offered to migrant people, refugees and asylum seekers, namely women and pupils in upper secondary school, who are particularly vulnerable to being marginalised in STEAM.

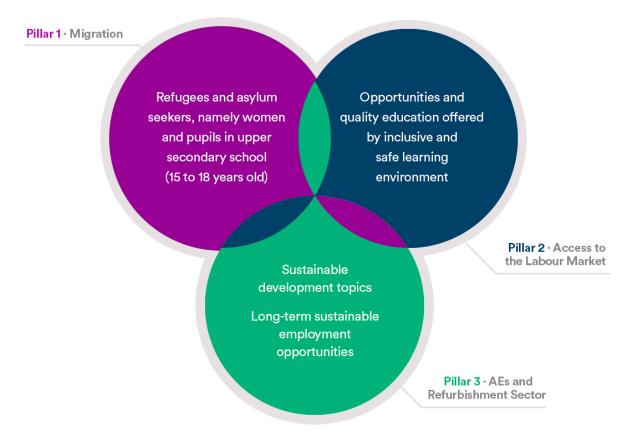




KEY FACTORS

- Focused on migrant people.
- Provided training in STEAM.
- Main objectives: through the STEAM training to prepare migrant people both to remain in Europe
 as well as to return to their home countries, with the appropriate tools and skills to rebuild them
 in a sustainable way.

Here it can be appreciated that the three pillars intertwined. For this good practice, all three pillars are relevant as following.



OVERVIEW

The premise:

In recent years, Portugal has seen an exponential growth of migrant population. In Braga (Portugal) the percentage of migrant population is below the national average, but its presence has had an impact on the territory and is requiring inclusion policies and the adoption of specific tools at the local level. The challenges are the production of innovative STEAM (Science, Technology, Engineering, Arts and Mathematics) teaching, which emphasises an interdisciplinary approach to learning and fosters creativity and critical thinking; using ICT (Information and Communications Technology) and innovative pedagogical approaches; guarantee the quality of the STEAM teaching (learning resources and material); ensure an organised initiative directly addressing migrant people, refugees and asylum seekers in STEAM courses and ensure the feasibility of the online platform.

STREAMIGPOWER

2022 - 2026



Funding:
Erasmus + Programme with 400.000 €.



Portugal



Implementing partners:

The project coordinator is University of UMinho (Portugal) and the implementing partners are Università' degli Studi di Perugia (Italy), Fundació Solidaritat Universitat Barcelona (Spain), Aristotelio Panepistimio Thessalonikis (Greece), Middle East Technical University (Turkey) and S.E.A.L. (Cyprus).

TARGET GROUP

 The target beneficiaries are migrant people, refugees and asylum seekers, namely women and pupils in upper secondary school (15 to 18 years old), who are particularly marginalised in STEAM.
 Notably, the face-to-face courses will focus on women and pupils (15-18 years old) and the online course will be available to all migrant people, refugees and asylum seekers.

MAIN ACTIONS

- Teacher training for delivering the full Program.
- The creation of the Program in all partner countries by: developing 2-days introductory blended intensive program
 on EU Civic Integration and Digital Storytelling; developing and delivering 5-days on-site Intensive Program (5
 STEAM courses on Environment and Fight against Climate Change).
- Developing of an open-access VLE platform to deliver the online courses created within the project, aiming the participation and content maintenance by other European and Worldwide Institutions.
- · Developing and delivering Intensive Program Modules in online format.

EXPECTED RESULTS & IMPACTS

- 2-days introductory Program and 5-days on-site STEAM courses Intensive Program.
- Digital stories by the participants on the Intensive Programs.
- VLE platform.
- Online Intensive Program Modules aiming to reach at least 500.000 migrant people, refugees and asylum seekers.
- Involvement of at least 250 migrant people, refugees and asylum seekers, focusing on women and pupils (15 to 18 years old).

SUCCESS FACTORS

• The creation of an open VLE platform that offers STEAM courses to migrant people, refugees and asylum seekers during and after the execution of the project.

SUSTAINABILITY AND TRANSFE-RABILITY

- To have funding that allows the development of this practice by guaranteeing the teacher's training and the feasibility and sustainability of the online platform.
- Regarding the social conditions, it is important to provide migrant women and pupils, who are often marginalised, opportunities and quality education to contribute to their socioeconomic integration.
- Sustainable development is introducing new priorities and creating new jobs in STEAM fields such as climate change, eco-sustainable construction, sustainable and renewable energy and sustainable development.
- The practice is still ongoing, but the goal is to promote participation and sustainability by other European and Worldwide Institutions.

LESSONS LEARNT (POSITIVE AND NEGATIVE)

• The outcomes of the project show great promise in addressing the demand and fulfilling the identified needs regarding the shortage of skilled labour in Europe and the attraction of the targeted groups to STEAM courses.



10. WOMEN4GREEN

Pillar 1 - Migration

Was the practice successful from the point of view of migration?

• The practice is not directly targeting migrant people as beneficiaries. Migrant women will benefit as a group in vulnerable situations since the practice contributes to strengthening social inclusion and promotes empowerment and a proactive attitude through the activities developed.

Pillar 2 - Access to the labour Market

Were there measures put in place to promote fair wages, non-discriminatory practices, equal and safe working conditions, and opportunities for career advancement within these sectors? If yes, which ones?

• This practice is directly targeting young women from 14 to 20 years old, providing them with the guidance for future green jobs and to contribute to gender equality in green economy jobs.

How was the practise successful from the point of view of access to the labour market?

- The practice is still ongoing but aims at being successful from the point of view of access to the labour market by offering a long-term perspective of inclusion in the labour market.
- With the contribution of local job centres, the project helps overcome the challenges of the
 uncertainty due to the novelty surrounding green jobs and skills, the lack of shared guidelines and
 the definition of a homogenous approach for green jobs.

Pillar 3 - REs and Refurbishment Sector

How was the practice successful from the point of view of the REs sector?

- Refurbishment and REs sectors are essential for a sustainable development for the future and green economy emerges as an opportunity for the disadvantaged group of women for long-term employability.
- The project foresees the development of a catalogue of green jobs, providing a clear understanding and overview of green economy jobs, the required skills and information about educational paths.

How did the initiative/project/institution/company address the specific needs and challenges faced by TCNs specifically women in accessing and participating in the labour market?

 The practice is still ongoing but aims at being successful from the point of view of raising awareness on sustainability and gender-equality in green jobs.





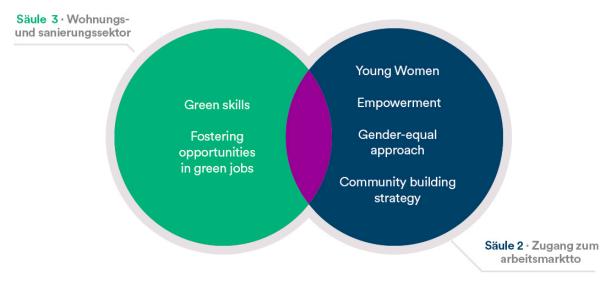
WOMEN4GREEN

The project aims at raising young women's awareness and interest in green jobs and empower them to decide for a job in this field providing them with the knowledge required to do so.

KEY FACTORS

- Focused on young women in general.
- The project, with the contribution of local job centres, helps overcome the challenges of the
 uncertainty due to the novelty surrounding green jobs and skills, the lack of shared guidelines and
 the definition of a homogenous approach for green jobs.
- To provide young women with the guidance for future green jobs and to contribute to gender equality in green economy jobs.

Here it can be appreciated that the three pillars are intertwined. For this good practice, only two pillars are relevant as the migration pillar is only indirectly targeted.



OVERVIEW

The premise:

Migrant population in Austria in percentage with the local population is significantly high and it increases every year. The country has adopted a specific inclusion programme for migrant people regarding language courses, civic education and vocational training.

Main challenges:

The challenges are the uncertainty due to the novelty surrounding green jobs and skills, the lack of shared guidelines and the definition of a homogenous approach for green jobs. The project is still ongoing, other challenges might be identified.



WOMEN4GREEN

2021 - 2024



Funding: Erasmus + KA2 with 295.475 €



Austria



Implementing partners:

The project coordinator is bit Schulungscenter GmbH and the implementing partners are Jonathan Cooperativa Sociale (Italy), SBTC DANISMANLIK TICARET LIMITED SIRKETI (Turkey), Wise Academy (Sweden), Osterreichische Jungarbeiter (Austria) and VisMedNet Association (Malta).

TARGET GROUP

• The target beneficiaries are young women between 14 and 20 years old residing in all partner countries. The practice is not directly targeting migrant women, but it acknowledges the discrimination related to differences in origin.

MAIN ACTIONS

- The development of a catalogue of green professions and skills.
- The development of a didactic concept to ensure a better learning experience and a Curriculum as a basis to the learning experience.
- The creation of community building strategy including 5 workshops and 7 podcasts with relevant stakeholders; the creation of learning material.
- The creation of a final guide for career counselling and companies.
- The organisation of a Learning Teaching Training Activity with a green company visit.

EXPECTED RESULTS & IMPACTS

- A total of 127 participants were involved in feedback, pilot tests, interviews, focus groups and workshops.
- 20 participants (young women between 14 and 20 years old) participating in one practical-oriented Learning Teaching Training activity and a green company visit.
- Community building through the creation of 5 workshops and 7 podcasts.
- Creation of a catalogue, a didactic concept and a curriculum, learning material, a guide and an experimental game.

SUCCESS FACTORS

• Provide young women with the guidance for future green jobs and to contribute to gender equality in green economy jobs.

SUSTAINABILITY AND TRANSFE-RABILITY

- Funding in order to develop the activities and the material related to the practice.
- The involvement and participation of career orientation centres.

LESSONS LEARNT (POSITIVE AND NEGATIVE)

• The green economy is a crucial tool for sustainable development and an opportunity in the period of economic recovery. Moreover, green jobs are essential for sustainable development and contribute to new opportunities for women.



6. Key takeaways from the good practices

These key takeaways have a twofold mission: to guide the POWGEN consortium in enhancing training and job placement for third-country nationals, with a particular emphasis on empowering women, thereby positioning POWGEN as a model of good practice; and to provide actionable insights for stakeholders aiming to develop similar initiatives. As the EU's green energy sector rapidly expands, addressing skill gaps, certification standards, and inclusive practices is essential to unlocking its full potential.

The following insights outline strategies to create accessible training pathways, recognise diverse qualifications, and implement supportive legal and social frameworks for migrant people and gender inclusion. Furthermore, they underscore the need for stable funding and collaborative frameworks that empower both organisations and participants, paving the way for a more equitable, diverse, and sustainable workforce in the renewable energy sector.

On training and labour market



1. Diverse skill training for a growing sector: To boost employability in the energy sector, training programs should broaden to include homologated certificates and specific skills recognized across the sector. Partnerships with accredited VET providers and the local administration can facilitate the recognition of foreign credentials.



2. European agreement for green jobs integration: The constant growth of the green energy sector and the rising demand for workers, call for a European-wide agreement on minimum requirements and certifications for hiring non-EU workers. Such an agreement would homogenise hiring practices, reduce administrative hurdles, and support labour market integration by providing consistent standards across Europe.



3. Creating career pathways, not barriers: Rather than redirecting individuals back to training when unable to find a job, authorities and VET providers should enable the exploration of a more diverse career pathway. Collaborating with local businesses can broaden employment opportunities, allowing individuals to consider different sectors and gain additional occupational skills.



On migration and cultural inclusion



4. Formal education as a bridge to legal residency: In contexts where national regulations permit, promoting formal education as a pathway to residency can significantly aid labour market entry for migrant people. This approach not only supports legal regularisation but also fosters professional growth and social integration, enhancing long-term employment prospects and ensuring that migrant people receive quality, relevant training.



5. Legal regularisation to combat work exploitation: Undocumented migrant people face heightened vulnerability to labour exploitation. Supporting their integration into the workforce requires prioritising legal regularisation to safeguard their rights and prevent exploitation. Promoting formal education as a favourable condition for regularisation, ideally at a European level, can provide a structured pathway to stability and protection for third-country nationals. Also, facilitating their access to work contracts helps in their regularisation and therefore to avoid exploitation.



6. Language training for social and professional inclusion: To break down integration barriers, training should include varied levels of language instruction. This approach supports participants' social inclusion, enabling better understanding of training content and fostering workplace communication, which is essential for long-term success.



7. Cross-sector collaboration for inclusive workforce: Successfully integrating migrant people in vulnerable situations, such as women and unaccompanied minors (migrant children and teenagers), into the green energy sector requires coordinated efforts among social services, employment agencies, and local governments. These collaborations can provide structured labour pathways that meet their unique needs. By leveraging existing pathways for job orientation and migrant people' inclusion, municipalities can provide targeted training and support to facilitate the inclusion of migrant people into the renewable energy and refurbishment sectors, helping to tackle social exclusion more effectively and foster a more inclusive workforce.



On women and gender equality



8. Promoting gender equality in the energy sector: With the REs sector largely male-dominated, targeted actions are needed to foster gender equality and support women's inclusion. Companies should be equipped to create welcoming environments for female employees by adopting inclusive hiring practices, offering targeted gender equality training, and adjusting workplace policies to support a healthy work-life balance. These efforts are essential to building a more diverse sector challenging the classic gender stereotypes and promoting inclusivity.



9. Targeted support for migrant women's inclusion: With existing good practices often overlooking migrant women, it's essential to implement targeted actions that address their unique challenges. Programs should be designed to consider specific barriers, including language skills, cultural differences, limited access to information, and childcare responsibilities. By offering tailored training, mentoring, and networking opportunities, alongside accessible resources such as language courses, childcare support, and legal guidance, these initiatives can empower migrant women, fostering their successful inclusion into the labour market and society.

On funding and structure for success



10. Ensuring stable funding to tackle energy poverty: For NGOs and local authorities providing essential services to combat energy poverty, sustained funding is crucial to maintaining impact, regardless of political shifts. Long-term success of these initiatives requires consistent financial backing, especially for training programs. Beyond European funding, partnerships with public administrations, vocational education providers, and private companies can help secure the resources needed to make a lasting difference in addressing energy poverty effectively.



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