

# SMARTLY

Youth Employment in the Green  
and Digital Economy



---

## **REPORT TITLE: INTEGRATING NEETS IN THE GREEN AND DIGITAL ECONOMY: RECENT TRENDS, POLICY DEVELOPMENTS AND FUTURE PROSPECTS.**

THE REPORT PREPARED WITHIN THE PROJECT SMARTLY – NEETS' EMPLOYABILITY IN THE GREEN & DIGITAL ECONOMY.

Izabela Marcinkowska, Marta Grabowska-Peda, Damien Tourte, Michalina Waclaw.  
Date: 29/07/2022



Co-funded by  
the European Union

# INTRODUCTION

The term NEET, which stands for young people who are not in employment, education or training, is relatively new. However, it is gaining more and more importance thanks to greater attention from institutions, international organisations and the media<sup>1</sup>. In recent years, the number of people qualifying for this group has reached very high levels, and the COVID-19 pandemic has added to the worsening situation. In this context, young NEETs have increasingly become the focus of political and scientific attention because it is assumed that NEETs are at risk of suffering long-term disadvantages. The departure of young adults from education and the labour market carries risks both for the individual and, in the long term, for society. This threat has been identified by the European Union (EU), which has set a target for this group at the EU level, according to which the percentage of young people not in employment, education or training should be less than 9% by 2030.

Those who are NEET are not a homogeneous group. Research shows that many young people are NEET at some point, for example, while waiting for a course to start or in between jobs, particularly in the case of the 18-24 age group<sup>2</sup>. However, being NEET for longer can lead to health risks, social exclusion and a lack of income opportunities. This is why it is so important to tailor strategies to help people in this group. The digitisation of the economy and the prospects associated with the green economy are significant opportunities. The source literature includes several terms describing the present economy, such as “new economy”, “digital economy”, “knowledge-based economy”, “electronic economy”, “web economy” or “information economy”. In the near future, 90% of jobs (especially engineering, medicine, art and architecture) will require some degree of digital skills<sup>1</sup>. These two trends will create many jobs as well as opportunities to acquire both digital and green skills and NEETs are a potential group to meet the market needs arising from these processes.

Governments are deeply concerned about the risk of a “lost generation” and have thus created a variety of programmes and policies for the purpose of supporting NEETs. The aim of this report is to compare the situation of NEETs at the European level with the situation in individual countries and the programmes and policies supporting this group, and to provide recommendations in order to develop the most effective plan of action. Although the definition of NEET in numerous studies includes those up to the age of 34, this report focuses on those up to the age of 29, which is related to the targets officially set by the EU.

The report is structured as follows: In Chapter 1, there is a presentation of the situation of NEETs at the EU level, followed by the same structure for Croatia (Chapter 2), Cyprus (Chapter 3), France (Chapter 4), Italy (Chapter 5), Poland (Chapter 6) and Malta (Chapter 7). In the summary, we propose recommendations based on the country case studies included in this report.

## 1. NEETS AT THE EU LEVEL

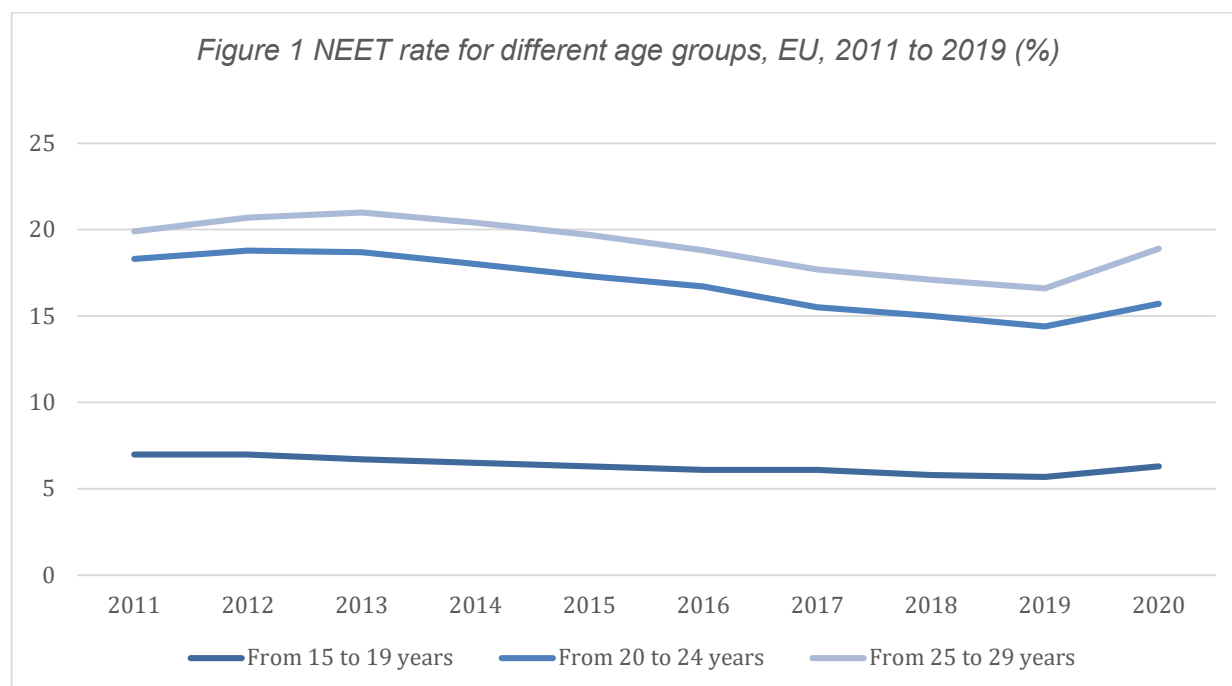
### STATISTICAL ANALYSIS OF THE NEET POPULATION AT THE EU LEVEL

---

<sup>1</sup> ILO, 2015.

<sup>2</sup> Public Health England, 2014.

According to Eurostat data, the share of young people aged 15-29 years in Europe who were not in employment, education or training was 13.9% in 2020. In absolute numbers, this corresponds to approximately 10 million young people belonging to the NEET group<sup>3</sup>. The percentage of NEETs by age group from 2011 to 2020 is shown below in Figure 1. In the European Union (EU), the vast majority of young people aged 15-19 are in education and training. Therefore, this age group had the lowest percentage of NEETs – 6.3% in 2020. The situation was completely different among people between 20 and 24 years old. In 2019, 15.7% of this population was not working, in education or in training. Moreover, there was a higher percentage of NEETs in the 25 to 29 age group – 18.9%. The percentage of 20-24-year-olds who were NEET remained consistently lower than the corresponding rates for 25-29-year-olds over the entire 2008-2020 period, likely reflecting – at least to some extent – the relatively high proportion of students who continued in education and training at that age<sup>4</sup>.



Note: For 2011-2019 EU-28 data, for 2020 EU-27 data

Source : Eurostat database [EDAT\_LFSE\_21]

Young women are more likely to be neither in employment nor in education and training. The data shows that there is a significant gender gap when it comes to the NEETs group. Between 2008 and 2020, the percentage of NEETs among women aged 15-29 was always higher than the corresponding figure for men. In 2020, the difference was 3.3 percentage points. However, an important pattern that can be observed since 2008 is the narrowing of this gender gap. Moreover, the 25-29 age group has a much larger gender gap (the percentage of NEETs is 23.4% for females and 14.5% for males) than the 20-24 age group (15.3% and 14.3%, respectively). The above relationships can be explained by a number of phenomena<sup>5</sup>:

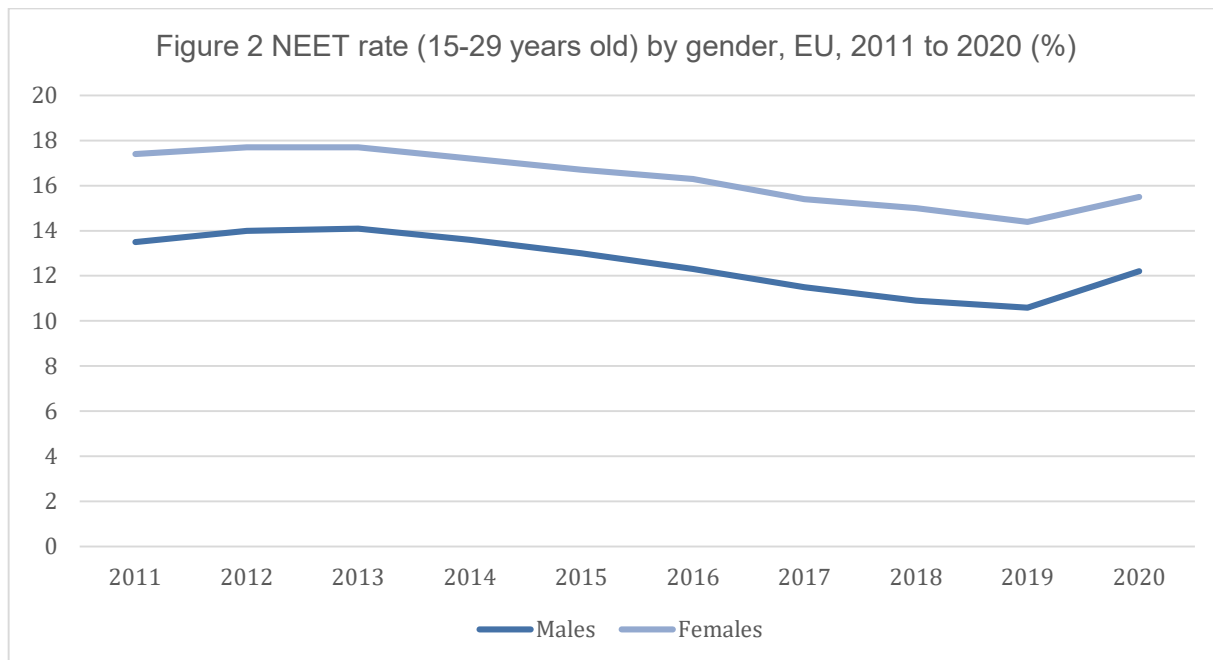
- Conventions or social pressures that tend to place greater emphasis on the role of women in the family and men in the workplace;

<sup>3</sup> European Commission, 2022a.

<sup>4</sup> In 2020, the highest percentage of young people in education and training was among people between 15 and 19 years old (90.5%). The lowest percentage was among the 25-29 group (21.1%), and in the 20-24 group, almost every second person was in education or training and the percentage was 53.1% (Source: Eurostat).

<sup>5</sup> European Commission, 2022b.

- Career counselling, which can reinforce gender segregation and steer women into a relatively narrow range of occupations;
- Labour market issues, such as: employers preferring to hire young men over young women; young women facing assimilation difficulties when returning to work after having children; or young women more likely being in low-paying jobs or having precarious employment.

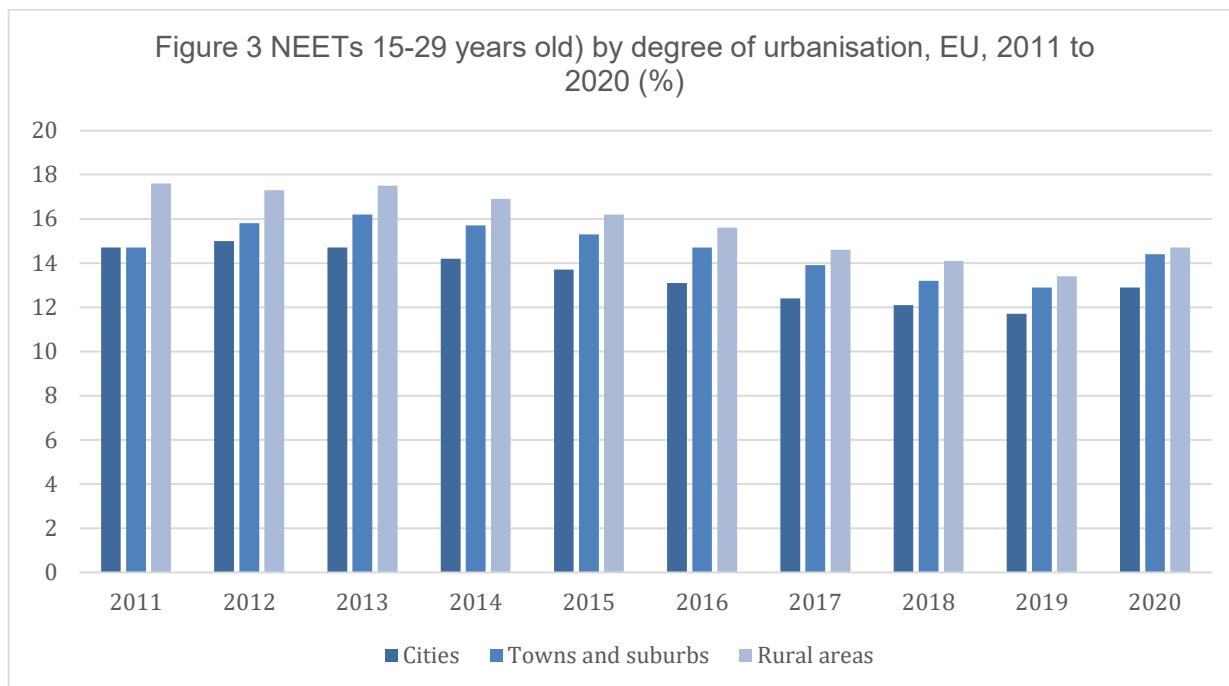


Note: For 2011-2019 EU-28 data, for 2020 EU-27 data

Source : Eurostat database [EDAT\_LFSE\_20]

Place of residence and degree of urbanisation do not reveal an important difference for the 20-24 and 25-29 age groups. Regarding the Eurostat definition, the “Degree of urbanisation (DEGURBA) is a classification that indicated the character of an area<sup>6</sup>”. Three main types of areas serve to classify degree of urbanisation: cities (densely populated areas), towns and suburbs (intermediate density area) and rural areas (thinly populated areas). Overall, the European young were less likely to be out of employment in 2020 if they lived in a city. For both age groups, the NEET rate was the lowest in cities (13.8% for the 20-24 and 17.1% for the 25-29 age groups), higher in towns and suburbs (20.1% for the former age group and 16.1% for the latter) and highest in rural areas (20.6% and 17.9%, respectively). It is important to note that the largest gender gap was in rural areas.

<sup>6</sup> European Commission, *Degree of urbanisation*.



Note: For 2011-2019 EU-28 data, for 2020 EU-27 data

Source : Eurostat database [EDAT\_LFSE\_29]

Education attainment level also influences the possibility of becoming NEET. The International Standard Classification of Education (ISCED) is commonly used to collect data and create statistics. There are eight levels of the ISCED combined into three categories<sup>7</sup>: less than primary or primary of lower secondary level of education (ISCED 2011 levels 0-2, considered as a low level of education), upper secondary or post-secondary non-tertiary education (ISCED 2011 levels 3 and 4, considered as an intermediate level of education) and tertiary education (ISCED 2011 levels 5-8, considered as a high level of education). In 2020, the NEET rate for those aged 20 to 24 years old was 35% (11.5% for those with an intermediate level of education for the same age category). Degree of education influenced also the older NEETs: the NEET rate for the 25-29 age group was 40.3% among those with a low level of education<sup>8</sup> (16.1% for those with an intermediate level of education).

## SECTORAL NEEDS

The EU is strongly in favour of addressing climate change at an international level. As part of this effort, a Green Deal strategy was unveiled in 2019. It assumes the transition of the EU economy to a sustainable economic model. The overarching objective of the EU Green Deal is for the EU to become the first climate neutral continent by 2050, resulting in a cleaner environment, more affordable energy, smarter transport, new jobs and an overall better quality of life<sup>9</sup>. The study conducted in 2021 identified that projects connected to the green sector could support close to three million jobs<sup>10</sup>. This means that there will be a growing demand for green skills.

<sup>7</sup> Fundacja Rozwoju Demokracji Lokalnej, 2020b.

<sup>8</sup> Fundacja Rozwoju Demokracji Lokalnej, 2020a.

<sup>9</sup> European Commission, 2019a.

<sup>10</sup> EY, 2021.

According to the OECD, green skills are the “skills needed to adapt products, services and processes to climate change and the related environmental requirements and regulations”<sup>11</sup>. On the other hand, Cedefop defines green skills as the “knowledge, abilities, values and attitudes needed to live in, develop and support a sustainable and resource-efficient society”<sup>12</sup>.

At this stage, no quantitative indicators on green skills exist. However, in 2021, the European Commission published a European Skills Agenda for sustainable competitiveness, social fairness and resilience<sup>13</sup>. It is a five-year plan to help individuals and businesses develop more and better skills and to put them to use. In the plan, the Commission has committed to defining a taxonomy of skills for green transformation that will allow the statistical monitoring of the greening of our professions and agreeing with Member States on a set of indicators to allow the monitoring and statistical analysis of green skills development.

In addition to green skills, digital skills also have a large impact on the labour market. In the future, nearly all jobs will require digital skills. There are various definitions for digital competences. In general, “digital skills encompass a range of basic to highly advanced skills that enable the use of digital technologies (digital knowledge) on the one hand, and basic cognitive, emotional or social skills necessary for the use of digital technologies, on the other hand”<sup>14</sup>. It is important to notice that according to European Commission data, two-fifths of the EU workforce have little or no digital skills. In addition, despite continued high levels of unemployment, there could be 756,000 unfilled jobs in the European ICT sector by 2020<sup>15</sup>. Moreover, the Education and Training Monitor revealed that this problem also touches young people. According to the study, more than 15% of young people in the surveyed countries do not possess a sufficient level of digital skills<sup>16</sup>. The analysis by type of educational and professional activity of young people conducted in EU Member States allowed for the identification of four groups of countries, differing in the levels of both the NEET rate and digital skills. The results are presented in Table 1.

Table 1. Digital skills and NEETs in the EU

Class	Country Group	Characteristics
1	Belgium, the Czechia, Ireland, France, Latvia, Lithuania, Poland, Slovakia	medium NEET rate; medium NEET rate among higher education graduates; poor digital competencies in searching for education offers, studying and training offers, and job offers and applying for them; strong digital competencies in sending and receiving e-mail messages.
2	Bulgaria, Italy, Romania, Cyprus, Greece	high NEET rate; high NEET rate among higher education graduates; poor digital competencies in searching for job offers and applying for them, searching for information about education, studying, and training, sending and receiving e-mail messages, creating websites and blogs and using online banking.

<sup>11</sup> OECD, 2021b.

<sup>12</sup> *Ibidem*.

<sup>13</sup> OECD, 2021a.

<sup>14</sup> Kiss, 2017.

<sup>15</sup> *Ibidem*.

<sup>16</sup> European Commission, 2020b.

3	Denmark, Germany, Estonia, Malta, the Netherlands, Austria, Finland, Sweden, the United Kingdom	low NEET rate; low NEET rate among higher education graduates; strong digital skills in searching for job offers and applying for them, searching for information about education offers, studying and training, sending and receiving e-mail messages, creating websites and blogs and using online banking.
4	Spain, Croatia, Slovenia, Portugal, Hungary, Luxembourg	medium NEET rate; medium NEET rate among higher education graduates; strong digital competencies in searching for job offers and applying for them, searching for information about education, studying and training, and sending and receiving e-mail messages; poor digital skills in using online banking.

Source: Kurzawa et al., 2021.

## CHALLENGES AND BARRIERS FOR NEETS

In analysing NEETs, it is important to identify the reasons why young people choose not to enter education, training or work. EUROFUND, in a 2017 study, identified seven groups of reasons why young people choose to become NEETs. These groups are described in Table 2. EUROFUND's findings suggested that in about 60% of cases being NEET was determined by the labour market and the remaining 40% of cases were due to social or personal circumstances such as family responsibilities, illness or disability. This implies that at least one-third of NEETs are at risk of further inactivity, taking into account only the long-term unemployed and discouraged workers<sup>17</sup>.

<sup>17</sup> Eurofound, 2017.



*Table 2. Reasons for being NEET according to EUROFUND*

Re-entrants	Have already been hired or enrolled in education or training and will soon leave the NEETs group.
Short-term unemployed	Unemployed and seeking work, and have been unemployed for less than a year; moderately vulnerable.
Long-term unemployed	Unemployed, seeking work and have been unemployed for more than a year; at high risk of disengagement and social exclusion.
Illness, disability	Not seeking work due to illness or disability; includes those who need more social support because they cannot do paid work.
Family responsibilities	Cannot work because they are caring for children or incapacitated adults or have other family responsibilities; 88% are women; a mix of vulnerable and non-vulnerable.
Discouraged	Believe that there are no job opportunities and have stopped looking for work; at high risk of social exclusion and lifelong disengagement from employment.
Other NEETs	A very heterogeneous group; includes the most vulnerable, the most privileged, and those who are following alternative paths, such as artistic careers.

Source: Eurofound, 2017.

The disengagement of young adults from education and the labour market poses potential risks both in the individual context and, in the longer term, for the economy and society. The high proportion of NEETs in Europe may indicate a wide range of potential candidates who compete in terms of competencies and skills. However, this high percentage may also reflect mismatches in the labour market, for example in terms of geography or skills. In a labour surplus situation, employers may prefer to hire young people who have completed a college degree or apprenticeship. As a result, young people with low or no qualifications may find it difficult to enter the labour market and may be excluded from the labour market or increasingly stuck in a cycle of low-paying jobs with few opportunities for advancement<sup>18</sup>. Young people who spend a significant period of time as NEETs are often affected by a range of social determinants such as poverty and social exclusion, insecurity, crime and health problems<sup>19</sup>.

NEETs are more likely to take low-paying jobs or jobs that do not provide additional training<sup>20</sup>. According to research, the effect of early unemployment can reduce wages by 8% to 15% before the age of 42<sup>21</sup>.

The effect of being NEET on the propensity for unhealthy behaviours is also a potential threat<sup>22</sup>. There is a link between youth unemployment and increased alcohol consumption. In one study, 11% of unemployed 16-25 year-olds said they had “turned to drugs or alcohol” as a result of unemployment<sup>23</sup>.

<sup>18</sup> Cueto, 2017.

<sup>19</sup> Public Health England, 2014.

<sup>20</sup> Audit Commission for Local Authorities and the National Health Service in England, 2010.

<sup>21</sup> Gregg and Tominey, 2004.

<sup>22</sup> Public Health England, 2014.

<sup>23</sup> The Prince’s Trust, 2010.



## GOOD PRACTICES CONNECTED WITH PROGRAMMES FOR NEETS

Recently, the term NEET has become increasingly used on the European policy agenda. For the first time, the group of young people who are not in education or training is explicitly included in the Youth on the Move initiative<sup>24</sup>. The initiative aims to “unleash the potential of all young people”. Its resources are aimed at enabling NEETs to re-enter education and training and the labour market.

In 2011, the Youth Opportunities Initiative pointed out the growing percentage of young people without employment, education and training. It proposed a combination of concrete actions by Member States and the EU to tackle this problem<sup>25</sup>.

The European Commission has repeatedly pointed to the need to combat the growing threat of NEETs. Among other things, it proposed greater use of the European Social Fund in the period 2014-2020 and making the sustainable integration of NEETs into the labour market (through youth guarantees and other measures) one of the investment priorities<sup>26</sup>.

In 2012, the European Commission proposed the Youth Guarantee programme, which was approved in April 2013<sup>27</sup>. The programme aims to reduce NEET rates by ensuring that all young people aged 15-24 who are not in employment, education or training receive a good quality offer of employment, further education, apprenticeship or traineeship within four months of becoming unemployed or leaving formal education. The European Commission also published the Youth Employment Initiative (YEI), supported by EUR 6 billion in funding, which targeted young people in the NEET group<sup>28</sup>.

The European Commission also set the European Pillar of Social Rights Action Plan, which sets out a number of EU actions that the Commission is committed to taking during the current mandate (until the end of 2024). For this reason, the EU set a target stipulating that the share of young people neither in employment nor in education or training should be less than 9% by 2030. In 2021, an average of 13.1% were identified as NEET within EU<sup>29</sup>. This is to be achieved through effective communication between states and stakeholders, and a range of programmes to support this group.

## 2. CROATIA

### STATISCAL ANALYSIS OF THE NEET POPULATION IN CROATIA

The Ministry of Labour and Pension System as a Youth Guarantee coordinating organisation formed the YGIP Council (Council of Minister of Labour and Pension System for development of Youth Guarantee Implementation Plan) as a working body, which brought together different stakeholders in order to propose and adopt measures for young people and to monitor its implementation. The Council agreed upon the overall definition of NEETs in Croatia. It was also decided that the Youth Guarantee entrants are young people registered as unemployed with the PES (Public Employment Services) registry. From the first

---

<sup>24</sup> European Commission, 2010.

<sup>25</sup> European Commission, 2011.

<sup>26</sup> European Commission, 2012.

<sup>27</sup> Council of the European Union, 2013.

<sup>28</sup> See: European Commission, 2013 or Directorate-General for Justice, 2013.

<sup>29</sup> European Commission, 2021.

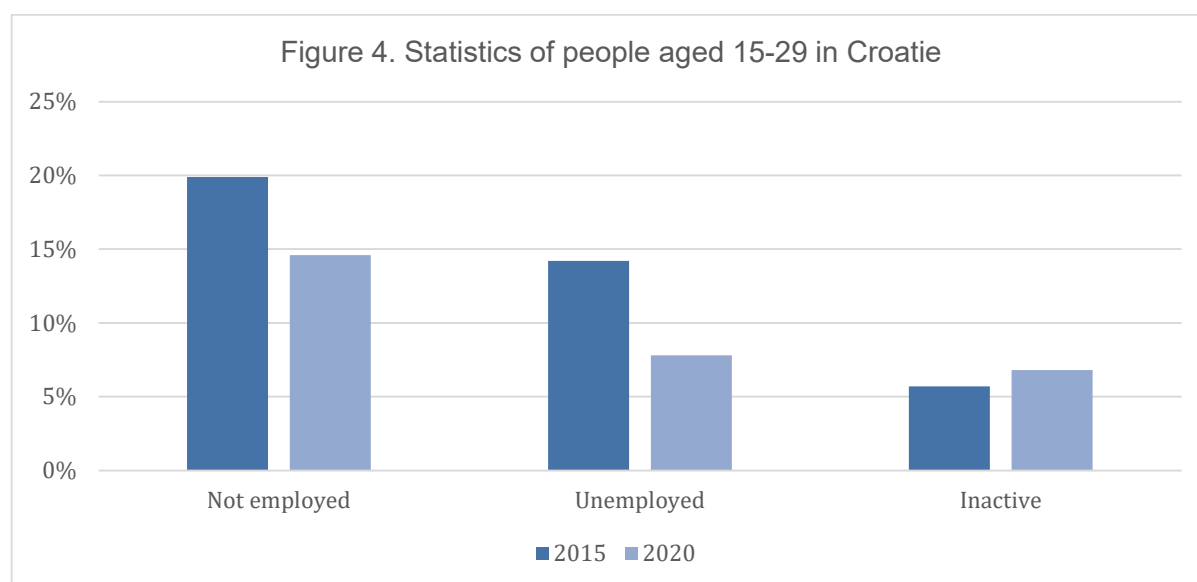
implementation of the Youth Guarantee in Croatia, the focus was placed on young people aged 15-29 years. Croatia has expanded the age group of young people to be included in the Youth Guarantee compared to the Recommendation, because it was noted that many young people who remain in education longer would be excluded from the Youth Guarantee.

Young people belonging to the NEET group are all persons from 15 to 30 years of age who are not employed, are not involved in education and who are not in any type of training. We distinguish between two subgroups of NEETs:

- Unemployed – young people registered as unemployed;
- Inactive – young people who are not in education (training), not employed and not registered as unemployed.

Employment and unemployment statistics mostly include data on people who are employed and people who are active in their job search (registered as unemployed).

It is estimated that, in 2021, the youth population aged 15-29 in Croatia was 666,989, which is almost 12% less than in 2015. The NEET rate in 2020 was 14.6%, which is 5.3 percentage points less than in 2015; however, the percentage of those inactive increased slightly in 2020.



Source: Data obtained from the Croatian PES registry.

The Croatian Employment Service profiles a person based upon a number of quantitative facts. The statistically assisted profiling includes the following attributes: age, disability, war veteran status, gender, children – by age group (women only), level of education, field of education, work experience, prior unemployment episode outcome (duration until employment), labour market status prior to unemployment, time since last being unemployed, occupation of previous employment (entries from employment only), industrial sector of previous employment (entries from employment only), reason of termination of previous employment (entries from employment only), month of entry, annual level and change of regional unemployment and employment (region-level), and region (national model). In addition to the abovementioned data, the profiling also includes a counsellor's assessment of the person. A counsellor, in their overall (holistic) profiling, includes skills such as languages, IT knowledge, additional training

(upskilling) and education, certificates, and motivation. Unfortunately, the system does not yet include soft skills. Green skills are also not evaluated or collected.

Table 3. Registered youth and employed youth from the PES registry, 2015 and 2021

	2015			2021		
<b>Estimated youth population (15-29)</b>	755,363			<b>755,363</b>		
<b>Registered unemployed youth</b>	Male	Female	<b>2015</b>	Male	Female	<b>2021</b>
<b>No school and unfinished primary school</b>	1,012	867	<b>1,880</b>	465	418	<b>883</b>
<b>Completed primary school</b>	4,032	3,203	<b>7,235</b>	1,411	1,291	<b>2,702</b>
<b>Secondary and upper secondary school</b>	30,307	29,484	<b>59,790</b>	12,155	12,900	<b>25,055</b>
<b>First degree college, professional study and college</b>	2,594	4,810	<b>7,404</b>	1,279	2,500	<b>3,779</b>
<b>University degree</b>	2,482	5,933	<b>8,416</b>	1,217	3,007	<b>4,224</b>
<b>Total</b>	<b>40,426</b>	<b>44,298</b>	<b>84,724</b>	<b>16,528</b>	<b>20,115</b>	<b>36,642</b>
<b>Employed from the PES registry</b>	Male	Female	<b>2015</b>	Male	Female	<b>2021</b>
<b>No school and unfinished primary school</b>	253	134	<b>387</b>	306	176	<b>482</b>
<b>Completed primary school</b>	3,092	1,792	<b>4,874</b>	1,711	1,104	<b>2,815</b>
<b>Secondary and upper secondary school</b>	40,787	33,193	<b>73,980</b>	21,693	19,804	<b>41,497</b>
<b>First degree college, professional study and college</b>	4,152	8,048	<b>12,200</b>	2,534	4,730	<b>7,264</b>
<b>University degree</b>	5,002	13,163	<b>18,165</b>	2,821	8,036	<b>10,857</b>
<b>Total</b>	<b>53,286</b>	<b>56,320</b>	<b>109,606</b>	<b>29,065</b>	<b>33,850</b>	<b>62,915</b>

Source: Data obtained from the Croatian PES registry.

Furthermore, a NEET tracking system was developed to reach out to inactive NEETs. This project established a data exchange from different institutions – the Croatian Pension Insurance Institute, the public employment service, and data on pupils and students from the Ministry of Education. The data were

exchanged at the OIB (Personal Identity Number) level and provided a broader demographic view of both the registered and inactive NEETs population. It was planned that the data exchange would provide clear insight into the number and basic characteristics of the NEET population, which would significantly facilitate the targeting of measures for the specific needs of each subgroup of young people in NEET status. Based on the evaluation of the data, we have noticed some shortcomings in data pairing and a new project – which is scheduled for next year – will include additional institutions in order to obtain more high quality data.

## SECTORAL NEEDS

Since 2014, there is a system for the registration and integration of occupational standards with the qualifications standards through units of competences and units of learning outcomes. This is known as the Croatian Qualification Framework – CROQF.

All registered standards are public and aimed at enhancing the development of new curricula based on learning outcomes, that is, units of competences, which meet the needs of the labour market. Sectoral councils have been established, which are advisory and professional bodies that assess proposals of units of learning outcomes, occupational standards and qualifications standards.

The CROQF is connected to the European Qualifications Framework (EQF) as well as the European Higher Education Area (QF-EHEA), which facilitates the mobility and competitiveness of Croatian citizens in the European education and job market. It is recognised as a key instrument in connecting education to the labour market demands.

The CROQF is the source of legislation, methodology, authority and information systems, which allows for a different way to develop educational programmes across all levels of education, taking into account the realistic needs of individuals and society, technology development and strategic guidelines for state development. Occupational and qualifications standards are introduced through the CROQF.

The legislation defines occupational standard as a list of all work assignments included in a certain occupation as well as a list of competences required to successfully fulfil them. Qualification standard is defined as the content and structure of a certain qualification. It involves all data needed to determine the level, volume and qualification profile, as well as information needed to ensure and improve the quality of the qualification standard. According to the guidelines concerning the CROQF registry, occupational standard includes a list of key work assignments in one or more workplaces that define an occupation and related individual competences needed to perform the job. Therefore, occupational standards should contain a list of key tasks and a corresponding list of competencies, and a list of competency sets with associated individual competencies required in a particular occupation<sup>30</sup>.

The Croatian Qualifications Framework Act clearly defines the following terms: occupational standard, qualification standard and educational programme. It is important to note that an occupation standard can be proposed by any legal or natural person, in compliance with the Qualifications Framework Act.

After an occupational standard is entered into the Occupational Standard Sub-register, it is up to the education system to match the standard to the qualification standard and educational programme. The

---

<sup>30</sup> Lisjak et al., 2021.

fundamental principle of matching education to labour market needs through the CROQF starts with occupational standard, which defines a need for a certain occupation, as well as the skills needed for performing said occupation. This ensures the connection between educational programmes and the labour market.

After a positive professional evaluation, the occupational standard/competence set is entered into the CROQF registry. Based on the new occupational standard/competence set, qualification standards or learning outcomes can be created.

## CHALLENGES AND BARRIERS FOR NEETS

From an unemployment and employment point of view, there are several characteristics related to young people. These are limited access to the first work experience, willingness to accept a job outside the place of residence, and motivation to engage in upskilling programmes and acquire new knowledge and skills through adult education (not exclusively related to young people, but to the total population).

In general, young people's attitudes towards employment are determined primarily by their social status, education and age, followed by regional affiliation, place of residence, parental education and gender. Young people with primary education are much more inclined to attach greater importance to good general education and knowledge of foreign languages as prerequisites for finding a good job than employed youth and students or those with higher education. Different attitudes have been established regarding the importance of professional qualifications by the highly educated compared to young people who have finished high school.

Women, highly educated young people, students and the unemployed, as well as residents of Northern and Central Croatia, are extremely prone to employment in public service. Highly educated persons want to work in large private companies. Students, young people with an upper secondary school diploma and residents of Northern Croatia and Zagreb are attracted to work in small companies. In contrast, men, lower educated and employed respondents, citizens of Zagreb and residents of Central and Eastern Croatia and Dalmatia would prefer to start something "on their own", be it agricultural production, crafts, trade or cafes.

Communication skills, professional qualifications, knowledge of foreign languages and good general education are considered to be the most important qualities for finding a good job. Readiness for inland mobility varies depending on regional affiliation and place of residence, while readiness for professional mobility is related to the educational status of the unemployed. Residents of larger urban centres are looking for work in their place of residence or the surrounding area, unlike young people from Eastern and Central Croatia who would go anywhere for work. Similarly, young people with lower educational status are more willing to accept a job in any profession, in contrast to highly educated respondents who mostly applied for jobs where their qualifications were sought.

There are several general characteristics related to young people including limited access to the first work experience, willingness to accept a job outside the place of residence, and motivation to engage in upskilling programmes and acquire new knowledge and skills through adult education. There is no evidence related to barriers in green and digital jobs. Investment in education, early childhood education and care, basic skills, tertiary educational attainment and labour market relevance of vocational education and training in Croatia is rather low compared to the EU average. This is especially the case for digital jobs and jobs in the green economy, which is just now starting to come into focus.

The labour market relevance of vocational education and training programmes appears limited, as suggested by the fact that more than half of registered unemployed persons have vocational education. Participation in adult education and educational programmes offered as part of active labour market policy measures are critically low – in 2019, only 3.5% of adults participated in lifelong education, compared to the EU average of 10.8%.

Regarding young people in age groups 15-19, 20-24 and 25-29 years of age, the largest number of unemployed persons belong to the 25-29 age group – 14,701 persons (45.8%).

At the end of 2021, there were 7,553 registered long-term unemployed young people, which makes up 23.8% of all registered youth. Of this, 3,785 long-term unemployed were in the age group 25-29.

Croatia, as well as other EU members, is planning to direct its economic development towards green and digital jobs. The European Green Plan defines a series of economic sectors or areas that have a predicted development of new jobs, and consequently new professions. Digital technologies are vital in achieving the goal of Green Plan sustainability in many different sectors. Transition management will lead to significant structural changes in the business models of employers in the Croatian job market.

Dynamic technological development, globalisation and demographic changes are influencing numerous social aspects, including the labour market. Given the problem with the qualified workforce shortage that Croatia faces, especially in green and digital economies, Croatian economic competitiveness is decreased. There are also difficulties in further growth and investment, especially during the recovery period following the COVID pandemic. There is a discrepancy between supply and demand in the labour market that is affecting employment and unemployment numbers, resulting in workforce import with a relatively high unemployment rate (6.6% in 2019) and long-term unemployment rate (2.4%).

Unemployment rates are in accordance with the EU average, but employment rates are considerably different. While the Croatian employment rate was 66.7% in 2019, the EU average was 73.1%. The discrepancy between needed and available skills, especially in the context of green jobs and digitalisation, could lead to an increase of structural long-term unemployment as young people can lack appropriate skills, while older workers gradually leave the labour market, resulting in workforce shortages. The training and education of today's workforce is a vital challenge, which needs to be addressed so that the skills of workers match the needs of the labour market, thereby ensuring a high-quality workforce.

The labour market is also changing. Ongoing progress, such as the automation and digitalisation of production and services is still affecting these changes. Transitioning between jobs is becoming more frequent. Young people are often switching between employment and unemployment, activity and inactivity or they are finding themselves in a non-standard type of work. Young people are especially highly represented in non-standard workplaces such as work platforms or part-time jobs that are not allowing them access to adequate social security. There is also a greater risk of becoming unemployed due to automation since entry-level positions include more tasks that can become automated.

With a broader double transition to a more digitised and greener economy, new possibilities will emerge, since there is a high probability that new jobs are going to become available in these areas. However, for this to be possible, young people are going to have to possess certain skills that will enable the adjustment to changing workplace requirements. An increased importance of digital skills and the skills needed in the green transition (such as entrepreneurial skills and career management skills) is expected. Human capital



investment among young Europeans at this moment is going to help make the European social market economy resilient to future changes: an active, innovative and qualified workforce is also a key for European global competitiveness.

Since the development of digital and specifically green jobs is at the beginning, we do not have information on analysis of the barriers.

In the upcoming period, digital and green skills will be in the focus since we are starting with the implementation of a voucher system for digital and green jobs. For the purposes of mapping digital and green skills, a working group which includes different stakeholders was established and it is currently mapping the green and digital skills.

Lifelong learning and demands for the competences needed for the green and digital transition will be encouraged by introducing a model of financing education through a voucher system in 2022. The plan is to include 30,000 persons in training for the competences needed in the labour market by 2026, 70% of whom should be persons with a vulnerable background.

In order to harmonise the education system and labour market needs, the Croatian Employment Service also publishes the Recommendations for Enrolment Policy and Scholarship Policies, pursuant to the Regulation of the Government of the Republic of Croatia on the methodology of monitoring, analysis and forecasting of the labour market needs for particular occupations and qualifications. These recommendations serve as a signal to the education system while adopting enrolment quotas in terms of which educational programmes should be decreased and which should be increased. The recommendations are given for all levels of education, from secondary school to university, and are issued annually at the regional and local level. They are also used while providing lifelong career guidance services offered by the Croatian Employment Service and developing annual training plans for the unemployed and other jobseekers.

## GOOD PRACTICES CONNECTED WITH PROGRAMMES FOR NEETS

In July 2021, the Government of the Republic of Croatia adopted the Decision on initiating the process of drafting the Digital Strategy of the Republic of Croatia for the period until 2030. The drafting of the Strategy itself is ensured within the National Recovery and Resilience Plan 2021-2026. The strategy will anticipate the need to respect existing standards, best practices and design principles when developing new services, systems and platforms. The strategy will include strategic goals and priorities that will be the basis for defining measures in the following areas, with the aim of establishing a systematic approach to digitalisation: The digital transition of the economy, Digitisation of public administration and justice, Development of broadband communication networks, Development of digital competencies and digital jobs<sup>31</sup>.

Moreover, several strategies were created supporting training among young people:

- Lifelong guidance and career development strategy – Objectives and measures of the Strategy emphasise different target groups and different types of counselling and support services for students, doctoral students, postdoctoral students, the unemployed and employees in order to increase

---

<sup>31</sup> Vlada Republike Hrvatske, 2021.



employability and career development skills and support services aimed at employers in human resources management<sup>32</sup>.

- Vocational Education and Training System Development Programme 2016-2020 - With this programme, the Republic of Croatia has defined a vision for vocational education and training until 2020. The programme is aimed at developing a system of vocational education and training that will be high-quality, efficient, attractive and innovative and that will enable the acquisition of competencies for personal and professional development, but also for continuing education and lifelong learning<sup>33</sup>.

The Government adopted the National Recovery and Resilience Plan 2021-2026 (NPOO), a financial incentive framework and mechanism with a distinct European and national component in response to the COVID-19 pandemic. It highlights connecting the labour market to the educational system by developing the skills needed in the labour market, with inactive young people as one of the target groups. The goal of this reform is to create new active labour market policy measures that are going to encourage employment and self-employment connected to the green and digital transition. Another goal is to increase the competitiveness and employability of the workforce in line with labour market needs, especially emphasising the activation of the long-term unemployed.

This reform will develop new active labour market policy measures focused on economic transition:

- 1) Employment measures for the green and digital transition;
- 2) Traineeship measures for the green and digital transition;
- 3) Self-employment measures for the green and digital transition.

The plan is to include 26,400 persons in the measures overall, while a special focus will be placed on the long-term unemployed and vulnerable groups. There is a plan to include 13,000 inactive, long-term unemployed and young NEETs in said measures by the end of June 2026.

Besides soft skills, skills related to the green and digital transition are also in high demand in the labour market. The Croatian Employment Service is planning, as part of the National Recovery and Resilience Plan 2021-2026, to establish a voucher system for the education of unemployed and employed persons in the fields of green and digital skills in high demand in the labour market. The goal is to strengthen the employability and competitiveness of workforce in the labour market. Persons in danger of losing their work positions or employment opportunities due to new technologies connected to the green and digital transition will have the opportunity to acquire new or improve existing knowledge and skills via education vouchers worth up to HRK 10,000. The goal is to increase these persons' employability and matching their skills with labor market demand. The plan is to include up to 30,000 persons in the voucher system.

The voucher system is in line with the European Skills Agenda, the Pact for Skills and is supporting the European Reskilling and Upskilling Initiative, as well as the Council Recommendation on Upskilling Pathways: New Opportunities for Adults. It is a part of a new adult education reform that establishes a new high-quality evaluation system. Additionally, by skill mapping (using competency sets established in occupation standards, as well as the ESCO skills base), the focus will be placed on the priority skills in the labour market, or on adult education programmes whose learning outcomes lead to obtaining those skills, especially green and digital skills.

---

<sup>32</sup> Vlada Republike Hrvatske, 2014.

<sup>33</sup> Vlada Republike Hrvatske, 2016.

When defining programmes leading to the required skills, the CROQF register will be used, ensuring their quality and relevancy to the labour market. Besides the existing CROQF register, a skill catalogue will be made, representing a tool to map all existing and needed skills in the labour market, which will be an integral part of the voucher application. Skills connected to the green and digital transitions will be detected separately.

An assumption was also made to reach not only active NEETs but also inactive ones. CISOK centres (Lifelong Career Guidance Centres - LLCG Centres) are central places for reaching out to and activating (inactive) NEETs. To be able to reach inactive NEETs, it is important to establish cooperation at the local level. By the end of 2021, the CISOK centres have signed 403 agreements on cooperation with partners at the local and regional level (primary and secondary schools, colleges and universities, volunteer centres, Roma associations, social welfare centres, public health institutes, youth associations, chambers and development agencies). Inactive NEETs make up about 6.6% of the total number of CISOK clients.

Lifelong Career Guidance Centres (CISOK) are established in order to provide lifelong career guidance services to all citizens based upon their identified needs with the main purpose of (re)integration into the labour market. A partnership approach is integrated into all CISOK activities: this approach creates a strong bond with stakeholders, including those in labour market sector, educational sector, and social inclusion, among others. The CISOKs collaborate with all relevant stakeholders in the regions in which they are established: NGOs, youth organisations, local bodies/municipalities, schools, universities, training providers, social institutions, and social partners, among others. An emphasis is placed on young people, for whom various activities are developed. The goal is to discover the potential and interests of young people and to provide them with guidelines for successful career planning and to develop and upgrade their career management skills. Special attention is paid to people who are not in education, employment or training (NEET) and who are not registered with the Croatian Employment Service (CES): the CISOK's function, *inter alia*, is coordination and cooperation with other partners in the outreach and activation of inactive NEETs in the labour market/education or in other activities aimed at increasing their employability.

The establishment of CISOKs enables gaining more precise overview of the NEETs at the national and regional/local levels, establishing a tracking system, developing local/regional plans of activation, and creating services, including identifying the responsibilities of partners in the mentioned activities. The above-mentioned activities include further developing the system for providing high-quality support to school-to-work transition.

Moreover, due to the high labour demand of people with specific IT knowledge, the Croatian Employment Service, in partnership with Google, has started a project of acquiring specific IT skills. Based on the cooperation agreement signed between Google and the Croatian Employment Service, a project was launched in March 2021. The project envisages the awarding of 375 scholarships for the unemployed and employed through the Croatian Employment Service. This is a project that is a continuation of the current cooperation between the Ministry of Labour, Pension System, Family and Social Policy, the Croatian Employment Service and Google in conducting training through the Grow with Google initiative. At the national level, target groups of participants are defined according to whom this opportunity would be offered to improve their knowledge and skills:

- Persons with completed secondary education;
- Persons with a college degree;
- Persons entering the labour market from the education system;
- Persons who have been registered as unemployed for more than a year.

It is planned that in 2022 a new Youth Guarantee Implementation Plan is to be designed. It will fully comply with the new recommendation. The new plan, among other issues, will specifically focus on:

- Strengthening mapping systems to allow a better understanding of the diversity of NEETs, including those who are only temporarily in that group due to the effects of the economic recession and those in vulnerable groups;
- Strengthening early warning systems and monitoring capabilities to identify youth at risk of becoming NEET while preventing early school leaving in collaboration with the education sector, parents and local communities and the involvement of youth policy services, social services and employment services;
- Improving profiling tools by applying a gender-sensitive approach to profiling and screening, taking into account young people's wishes, motivations, barriers and difficulties, including reasons for being unemployed or inactive;
- Assessing the digital skills of all NEETs by using the European Digital Competence Framework (DigComp) and available (self-) assessment tools, ensuring that tailor-made training is provided to all young people to improve their digital skills;
- Ensuring the training and retraining of green skills, entrepreneurial skills and career management skills, using existing competency frameworks.

As part of the development of the Labour Market portal, a data exchange between the employment service, educational system and pension system is planned. This will enable the monitoring of NEETs. Through this data, we will gain accurate information on persons with NEET status. In accordance with the above-mentioned, promotional outreach campaigns will be planned to provide these young people with adequate support for re-entering or actively entering the labour market.

One of the most important new measures related to young people will be the implementation of education/training through the voucher system. In the period from April 2022 to June 2026, vouchers will be awarded for education in digital and green jobs and in accordance with the principles of the CROQF, that is, in accordance with the needs identified for specific skills in the labour market. The goal is to include 30,000 people in training/education through vouchers. At least 40% of vouchers will be awarded to the long-term unemployed, inactive people and NEETs. Additionally, 70% of vouchers will be awarded to programmes that promote green skills.

## 3. CYPRUS

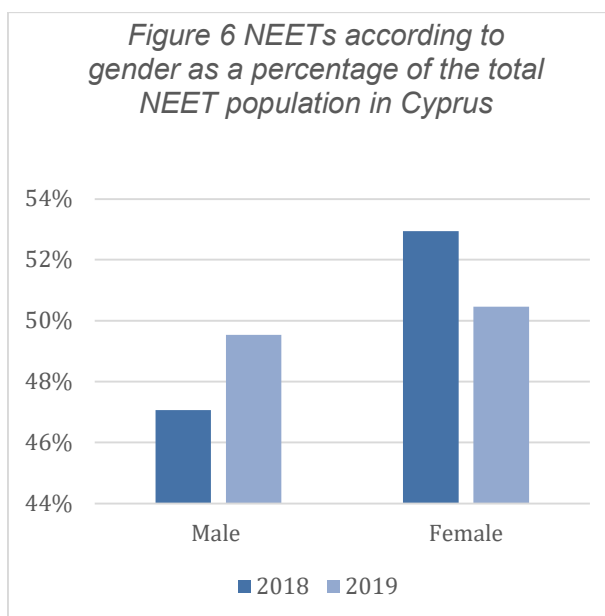
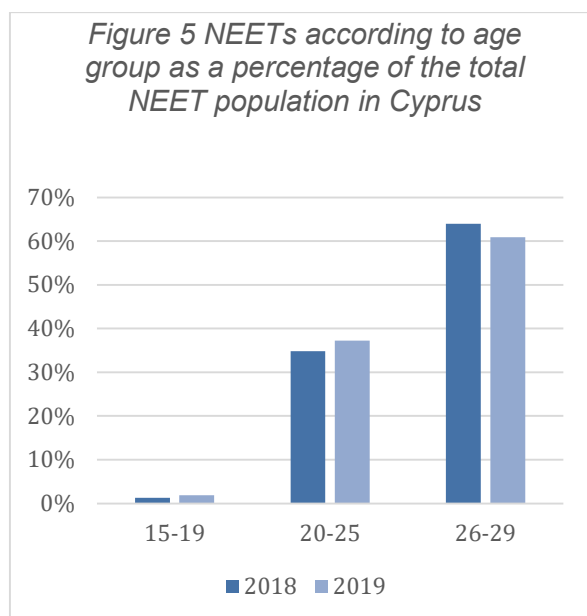
### STATISTICAL ANALYSIS OF THE NEET POPULATION IN CYPRUS

The analysis of available data was conducted by the Labour Market Observatory of the Department of Labour using the computerised information data of PES and the computerised information data of the Welfare Benefits Administration Service.

After combining the information from the two databases, duplicates were omitted and a new set of data was produced which included all persons who are: no longer active in the unemployment registry, below the age of 29, not working, not soldiers or students, not under training, and not a recipient of the GMI (Guaranteed Minimum Income).

Concerning district, out of 11,113 persons concerned as NEETs in 2019, the majority – 3,977 persons – were from Nicosia, followed by 2,806 from Limassol, 2,134 from Larnaca, 1,487 from Paphos and 709 from Ammochostos. The number of females was marginally higher than that of males – 5,608 females compared to 5,505 males.

Concerning age, the majority of NEETs were between the age group of 26-29 years old (6,769 persons), followed by 20-25 years old (4,136 persons) and 15-19 years old (208 persons).



Source: Eurostat database [EDAT\_LFSE\_20]

It should be noted that the first mapping, which was finalised on 17 December 2018 with a total number of 11,723 NEETs, was given to the Ministry of Education and Culture (the data that could be given under GDPR constraints, that is the four-point digit area code of the person’s place of stay by district) and was used in the implementation of their project for NEET outreach activities facilitating the search and contact of these persons.

The information received after the second mapping will be used to feed into the next steps of the action plan to reach this population. No actions were taken during 2020-2021 due to the pandemic.

## SECTORAL NEEDS

The Human Resource Development Authority of Cyprus (HRDA), realising the magnitude and importance of the change that the transition to a green economy will bring to the labour market, conducted a study in 2017. Its main aim was to examine and analyse the green economy and green occupations, to map out the green economy of Cyprus and to identify green skill needs in Cyprus’ economy for the period 2017-2027. The study provided forecasts for employment and demand for labour in the economic sectors and occupations with participation in the green economy for the period 2017-2027. Additionally, it identified the green skill needs for specific occupations of the green economy of Cyprus.

The acquisition of the necessary knowledge and skills by persons employed in green occupations is a necessary prerequisite for the achievement of the goal to transition to a green economy. Additionally, it is important for people to continuously upgrade and enhance the basic and specialised skills and knowledge

needed in their occupation. Towards this direction, the study identified the main thematic categories of specialised knowledge and skills of the occupations with participation in the green economy. These can be used in the design of specialised training programmes. Several of the identified green skills are new skills that relate to new green technologies, environmental legislation and environmental issues that require a high degree of specialisation.

However, the majority of the identified green skills are existing skills which can be adapted to the needs of the green economy and are considered as indispensable for the development of a greener economy, such as project management, strategic planning, entrepreneurial skills, processes optimisation, personnel management and quality management.

The study led to specific suggestions aiming for the timely and planned response to the future situation in the labour market resulting from the transition to a green economy. The suggestions concern the following strategies:

- Employment and human resource development;
- Education;
- Training.

The synergy and complementarity of environmental, economic, social, educational and employment policies are key to the success and effectiveness of these suggestions. The coordination between the stakeholders responsible for the formulation and implementation of these strategies is imperative so that these interventions have the greatest effectiveness with the minimum requirements in financial and human resources.

## CHALLENGES AND BARRIERS FOR NEETS

Cyprus' education system has been undergoing major reforms during the past few years, aiming to modernise pedagogical policies, upgrade structures and improve infrastructure. The main focus is on improving the quality of education and making better connections between the school and the labour market.

The modernisation of the curricula of both primary and secondary education, the digitalisation of education, the establishment of a new system for teacher and school evaluation, the addressing of skills mismatch between education and the labour market, and the extension of free compulsory preschool education are basic educational reforms which promote the improvement of students' outcomes.

At the same time there are new challenges brought to the foreground by the pandemic, namely the need to speed up the digital transformation of schools, while making sure that no child is left behind. The new global realities also call for further investments for a green transition at all levels, including the content and infrastructure of education. Both the green and the digital transition are fully in line with national and European priorities as spelled out in the European Education Area Recommendations.

Cyprus lags behind in digital performance and maturity – including in rankings on digital skills – in relation to other EU Member States, which is an issue that needs to be addressed early on to ensure a successful digital transition by designing and delivering a comprehensive plan, either by building on existing measures or by formulating new ones to cater to the needs of all population groups as well as specifically ICT professionals. A digitally fit society leads to digitally intensive industries, creates new career opportunities, promotes innovation and entrepreneurship and increases the country's growth potential, resilience, and international competitiveness, creating an environment conducive to foreign investment.

Other barriers of unemployed NEETs to enter the labour market in Cyprus include:

- Low minimum wage in comparison with relatively high social benefits and other financial support (i.e., family support);
- Cyprus' economy cannot sustain a high influx of tertiary university graduates;
- Cyprus is ranked at the bottom of the EU's rank on VET graduates.

With reference to the Education and Training Monitor 2021, Cyprus has the lowest proportion of STEM graduates in the EU<sup>34</sup>, currently standing at 13.8%. The number of graduates in health and STEM fields has been lower than in most EU Member States in recent years<sup>35</sup>. In 2019, the proportion of female STEM graduates in relation to the total number of female graduates stood at 7.7% (versus an EU average of 14.7%), with a decrease of 2.6 percentage points compared to 2014 (10.3%). One in three STEM graduates is a woman (36.2%). Cyprus aims to improve skills relating to STEM education through the EU Recovery and Resilience Facility. This trend can be also associated with the NEETs in Cyprus, implying that such skills are also absent, making it harder for them to enter the labour market.

The main challenges for youth in Cyprus are:

- NEETs in the 20-24 and 25-29 age groups were heavily affected by the economic crisis and then the COVID-19 pandemic;
- Female NEETs face higher barriers to entering the labour market or any form of education;
- The relative share of unemployed NEETs within the total NEET population is increasing rapidly, which suggests that inactive and unemployed NEETs should be treated as two separate groups with distinct and specialised policy interventions;
- Secondary technical and vocational education systems need further reform. The proportion of upper secondary students in this type of education remains low (16.7% vs. an EU average of 49.3% in 2017).<sup>36</sup>;
- Educational and training reforms could focus on “green jobs” to take advantage of the low carbon transition.

Renewables are expected to provide 25-40% of Cyprus' electricity generation by 2030 (with solar photovoltaic and wind leading the way)<sup>37</sup>. Total employment in the green economy during 2017-2027 is expected to grow by 2-2.8% annually, expanding the green labour force by 26.7% and creating 20,885 new jobs<sup>38</sup>. This provides Cyprus with a historic opportunity to reduce youth unemployment and the number of those belonging to the NEET group.

## GOOD PRACTICES CONNECTED WITH PROGRAMMES FOR NEETS

The Cyprus Recovery and Resilience Plan (the RRP) reflects the integrated, ambitious and at the same time realistic plan of the Republic of Cyprus, for the effective utilisation of EUR 1.2 billion to be allocated to Cyprus for the period 2021-2026 by the EU Recovery and Resilience Facility (the RRF).

---

<sup>34</sup> Term STEM stands for college programs in science, technology, engineering and mathematics.

<sup>35</sup> European Commission, 2020a.

<sup>36</sup> European Commission, 2019b.

<sup>37</sup> IRENA, 2015.

<sup>38</sup> HRDA, 2018.



As stated in the RRP: Outreach to young NEETs continues to be one of the major challenges as unemployed NEETS accounted for 5.4% of the population aged 15-24 and 8.3% were inactive and not in education or training. The NEET rate for those aged 15-29 was 14.1% in 2019 compared to 12.6% for the EU-27.

Efforts to strengthen outreach activities to NEETs and build partnerships with local actors were interrupted due to the COVID-19 pandemic. According to the same report, Cyprus relies heavily on informal settings or private institutions and initiatives. Additionally, the Cypriot labour market is characterised by skill shortages and a large digital and entrepreneurship skills gap.

Among its other priorities, the RRP focuses on:

1. Modernising the educational system, including upskilling and retraining focused on the digital transformation of schools, while making sure that no child is left behind. Also, it includes the upgrading of school infrastructure and making appropriate equipment accessible to all students and teachers as well as supporting remote teaching;
2. Upgrading and promoting vocational education and training (VET) and, more specifically, improving its relevance to the Cypriot labour market and enhancing its attractiveness. Similarly, the component addresses enhancing the attractiveness of STEM subjects from an early age;
3. Addressing the skills mismatch between education and the labour market and extending free compulsory preschool education are basic educational reforms promoting the improvement of students' outcomes.

Under the Cyprus RRP, there are several reforms planned which are targeted at supporting the abovementioned priorities. The first addresses the skills mismatch between education and the labour market (secondary and higher education) by continually monitoring skills needs and developing and implementing measures towards meeting those identified needs. The ultimate objective of the proposal is to improve the competitiveness of the country and enhance social cohesion, while eliminating the disparities between the labour market and overall education. The Strategy will be translated into an action plan with a well-rounded series of actions and activities that together will form the backbone of reforms to the education system and the labour market in the coming years. It could include actions such as:

1. Enhancement of the Career Counselling and Educational Services (CCES) of the Ministry of Education, Culture, Sports and Youth (MOECSY);
2. Reform and modernisation of the secondary schools' educational programmes and curriculum to improve, among others, digital literacy, emotional intelligence and soft skills, and entrepreneurship skills;
3. Introduction of two additional programmes of study offered by the Department of Secondary General Education and two additional programmes of study offered by the Department of Secondary Vocational Education and Training that will be tailored to labour market needs;
4. Introduction of an in-job shadowing programme for the pupils of the Department of Secondary General Education;
5. Provision of high-quality professional training to secondary education teaching staff in close collaboration with labour market experts;
6. Upgrading of teaching rooms and laboratories in schools so that teaching staff and students have access to the latest technology and equipment relevant to their studies.

Furthermore, an Action Plan was created, which aims at the implementation of specific measures. Among them are plans to design stimulating programmes, measures and instruments to strengthen digital fitness



at all levels of society, including in remote areas and vulnerable societal groups. The digital skills of the Cypriot population in its whole are quite low, and especially among specific target groups, such as the elderly, people in remote areas, and NEETs, among others. Therefore, the digital transformation that the public administration and businesses are pursuing will not have the anticipated value added if its benefits and applications cannot be utilised by all.

The proposed training actions under the European Social Fund Plus (ESF+) and under the RRP will both be handled by the Human Resource Development Authority of Cyprus (HRDA) and thus overlapping will be avoided. Under the ESF+, the HRDA will propose the development and promotion of individual learning accounts (ILA) to promote lifelong learning and better cover the training needs in the economy. Furthermore, training programmes and placements for acquiring job experience targeted at NEETs will be provided. This way complementarity between the two actions will be ensured. The training programmes addressed to the NEETs (15-29) will be available all year round and will cover urban and rural areas in Cyprus.

The training programmes will be in line with skills forecasts carried out by the HRDA Research and Planning Directorate and in close cooperation of the Deputy Ministry of Research, Innovation and Digital Policy. Continuous feedback will be provided regarding programme participation and progress to ensure successful implementation. The HRDA has in place a comprehensive system for evaluating the impact of its activities. Evaluation studies are conducted on a continuous basis regarding the impact of the HRDA schemes on the participants. All participants of the project will be required to complete an online questionnaire upon successful completion of their training programme as well as six months later through telephone interviews.

Training programmes for young people not in education, employment or training (NEET) includes the acquisition of basic knowledge and skills (for example literacy, mathematical skills, digital and technological skills, interpersonal skills, entrepreneurship), with the aim of helping young people aged 15-29 to integrate into the labour market. In addition, the upgrading of existing knowledge and skills and the acquisition of new knowledge and skills will help them to seize the employment opportunities that will arise in dynamic sectors of economic activity, such as the green and blue economy, and will prepare them appropriately for the changing nature of work, in particular that related to the digital transition. Specific training programmes for the acquisition of digital skills and skills related to the green and blue economy are among the planned actions for the HRDA during 2021-2026.

The successful implementation of the National Lifelong Learning Strategy of Cyprus (2021-2027) seeks to help citizens achieve their goals and meet their learning needs in all educational environments, whether formal or informal learning. At the same time, it seeks to provide them with opportunities for personal development and well-being, both in their work and personal lives. In particular, the new National Strategy has created significant expectations for the coming period. It is expected to lay the foundations to address existing challenges such as low adult participation in lifelong learning, high unemployment among young people, and to strengthen efforts to upskill low-skilled adults, including NEETs. Additionally, the main objective of the strategy is to promote policies and actions for the upgrading and enhancement of the skills of groups of the population focusing on digital and green skills, following the same philosophy laid down in the Cyprus Resilience and Recovery Plan (RRP).

Policymakers also developed the Cyprus Digital Strategy 2020-2025. Under this newly formed strategy, the new digital society portfolio encompasses initiatives aimed at:

- Development of basic lifelong digital skills to equip every citizen (including the NEETs) with the skills required to confidently interact with the digital government, manage their information and communications, transact digitally and stay safe online;
- Development of the next STEM generation will increase the number of graduates from universities and connect them to the world or work by creating more opportunities in the labour force;
- Design of reskilling and upskilling interventions aimed at the private sector workforce but also aimed at unemployed persons, so as to increase their competitive edge in the labour market;
- Promotion of a culture of digital innovation and entrepreneurship at all levels of society.

The Department of Labour will promote outreach activities for young NEETs in order to increase their willingness to actively seek employment or training as well as to assist them in the process. This action will be taken as a continuation of actions promoted by the Technical Support Programme of the European Commission and the PES Network for promoting outreach activities in Cyprus.

In the framework of the implementation of this action, the Department of Labour will purchase the services of a group of 12 employment counsellors, which will form a mobile unit that will provide intensive personalised employment services to young NEETs in remote areas using the results of the mapping exercise and the support of local stakeholders and social partners for the period 2022-2026. For this purpose, the Department of Labour will also proceed with the purchase of vans and relevant technical and other equipment. The employment counsellors will be university graduates with degrees in sociology, psychology or other related subjects. In the process of the services provided to young NEETs, personal plans will be designed with the help of a specialised questionnaire. The main goal of this intervention is to achieve an increase in the activation of young people, either by coaching them in the process of finding employment or by improving their employability by referring them to training/education programmes.

The budget of the action will be EUR 3 million and it will include the employment counsellors' wages, the purchase of the vans and the other relevant equipment as well as the purchase of the rights to use the specialised questionnaire which will be adopted for the interviews with young NEETs.

Parallel to the outreach activities described above, during the Programming Period 2021-2027, the following active measures are expected to be announced by the PES regarding NEETs:

- Incentive scheme for the recruitment with flexible arrangements of young people aged 15- 29 who are NEET, who have difficulty entering and remaining in the labour market without assistance, and who wish to work on the basis of some flexible form of employment, with a budget of EUR 10 million (co-financed by the ESF+);
- Incentive scheme for the employment of young persons aged 15-29 who are not in employment, education or training (for direct recruitment) (with a EUR 10 million budget) for full employment for a period of 10 + 2 months (co-financed by the ESF+);
- Incentive scheme for the recruitment of young people aged 15-29 who are NEET in combination with a two-month training, for the purpose of developing their digital or green related skills, with a budget of EUR 7,824,000 and an expected 815 participations (co-financed by the SDS Recovery and Resilience Plan).

## 4. FRANCE

### STATISTICAL ANALYSIS OF THE NEET POPULATION IN FRANCE

In France, in 2017, 13.9% of young people aged from 15 to 29 years old were NEETs. This means that 1.6 million youth were not employed, not in school and not in training. In 2019, there were less NEETs, but the difference is not glaring: 12.9% of the population were NEETs, corresponding to 1.5 million youth. As a result of the COVID-19 pandemic, the proportion of young NEETs increased by more than one percentage point, to 13.5% of this age group in 2020. Given the breaks in the series on the concept of NEET itself, INSEE (National Institute for Statistics) does not quantify the number of additional young people this one-point increase represents. If we relate it to the number put forward for 2019, we obtain an order of magnitude of some 130,000 additional young people concerned, i.e., a total exceeding 1.6 million last year.

It appears that NEET youth are less educated, more likely to live with their parents and more likely to have a recognised disability than other youth. In France, there are different integration organisations, such as the public employment service, that NEETs can contact to undertake an insertion process. Within the NEETs who have been in contact with an integration organisation, 68% of them were employed in the previous 12 months or were studying in school and 56% were unemployed or training for one year or more. In 2018, 53% of NEET youth are unemployed as defined by the International Labor Office, meaning that they were actively seeking and wanting to work and were willing to take it on short notice. The rest were inactive. Among the inactive NEET youth, two-thirds do not wish to work, for some of them for reasons of childcare or to help a dependent person or due to a deteriorated state of health.

In France, the profiles of NEETs are very diverse. However, it seems that two major factors can be highlighted: most of the NEETs are either unemployed and untrained for at least a year or are young mothers and without degrees. However, the differences in NEETs between men and women are less marked in France than in Europe as a whole. In 2019, the share of NEETs among 15-29 year olds is slightly higher in France (12.9%) than in the EU as a whole (12.5%). In France, while the young are less often in employment and more often in training, they are slightly more often unemployed overall.

### SECTORAL NEEDS

In March 2022, the state set up the national observatory of jobs and occupations in the green economy (*Onemev*) in order to identify and better define the jobs in the green economy in a context of reorientation of the economic model. This observatory centralises and produces methods, reference figures and analyses useful for disseminating knowledge on jobs and occupations in the green economy at the national level. In 2020, 14.1% of job applications and 17.5% of job offers submitted by employers to *Pôle emploi* (national public service for job seekers) concern green jobs (with an environmental purpose) or greening jobs (where skills are evolving to integrate environmental issues). The greening jobs in the sectors of building and transport are the most sought after, both by employers and by job seekers. Regarding green jobs, jobs related to the cleaning of urban areas are the most in demand. Jobseekers looking for work in green jobs are less qualified and have been unemployed longer than in greening jobs. While the majority of job offers are for fixed-term contracts in green jobs (53%), they are more likely to be for permanent contracts (46%) and temporary contracts (27%) in green jobs.

Green jobs are characterised by a higher proportion of jobseekers with no or few diplomas (level 3 of the European Qualification Framework: *CEP, brevet des collèges*,...: 29% against 14% among all jobseekers). This category is strongly represented among jobseekers looking for jobs related to waste, cleaning of urban areas and maintenance of natural areas. The high proportion of low-skilled people among jobseekers in green jobs partly explains the fact that there are more very long-term unemployed (24 months or more) in this category of jobs (33% compared with 28% for all jobs). More generally, the majority of jobseekers in all green economy occupations have been registered with the *Pôle emploi* for at least 11 months (54%), 20% are considered long-term unemployed (12 to 23 months), and 26% have been unemployed for at least two years.

In 2020, employers filed 20,600 job offers with *Pôle emploi* concerning green jobs and 381,700 concerning greening jobs. In total, these 402,300 job offers in the green economy represent 17.5% of all job offers. Nearly 70% of these offers concern green jobs in the building sector (48%), in particular construction-renovation jobs, and in transport (21%), among which driving jobs account for almost all offers. The industry trades account for 12% of the offers: these mainly concern the greening trades of automotive mechanics (72%), whose skills are likely to evolve to take into account, in particular, diagnostic missions or technical control of the environmental performance of vehicles. Green jobs in health, safety and the environment account for 6% of offers in this category.

The level of qualification sought depends strongly on the category of occupation. Skilled workers (11%) or qualified workers (31%) characterised the greening professions and are particularly sought after in the building trades. Unskilled employees (26%) and labourers (17%) are the most sought-after profiles for green jobs, particularly those related to waste, urban cleaning and the maintenance of natural areas. In comparison, skilled (37%) and unskilled (24%) employees are the most sought after in job offers.

The Ministry of Ecology has published prospective studies by sector of activity in an attempt to identify the changes in occupations and employment prospects associated with the ecological transition and compliance with France's climate commitments.

Several prospective studies on the challenges of the digital transition have been carried out by professional bodies and public players. Unfortunately, they have been carried out by type of professional sector (public sector, tourism, cultural creation), and France does not have an overall vision of the challenges of the digitalisation of professions and jobs.

The need to strengthen the digital skills of young people with fewer opportunities is considered a priority in the recovery plan (see below), but more from the point of view of social integration and strengthening basic skills than as a means of integrating NEETs into the workforce.

Thus, the responses provided will essentially aim to strengthen basic digital skills but will not specifically direct young people towards digital professions, for which the state continues to promote traditional training courses leading to qualifications, which are not always accessible to NEETs.

## CHALLENGES AND BARRIERS FOR NEETS

The two major barriers for French NEETs to integrate into the labour market are if they do not have a diploma or if they are young mothers.

The diversity of profiles among young NEETs is matched by a strong heterogeneity of resources and living conditions. Based on diplomas, situations *vis-à-vis* work or the resumption of studies and the presence of dependent children, the INJEP (National Institute of Youth and Popular Education) proposes five types of NEET from 18 to 24 years old:

- College graduates looking for a job (16% of NEETs in 2014);
- College graduates looking for “odd jobs” while waiting to return to school (19% of NEETs in 2014);
- Mothers far from the labour market (14% of NEETs in 2014);
- Vocational school graduates who are unemployed for a short period of time (31% of NEETs in 2014);
- Those without diplomas who are far from employment (20% of NEETs in 2014).

Representing 16% of the total, newly graduated job seekers are considered to be in the most favourable situation with respect to the job market. Of those in this group, 70% have been looking for work for less than one year and, in 2014, they had a yearly average of EUR 7,700 of resources, of which nearly EUR 4,000 came from work income and just over EUR 2,300 from parental aid. The second category, comprising 19% of NEETs includes “baccalaureate holders looking for ‘odd jobs’ while waiting to resume their studies”.

The third profile identified is that of “mothers who are far from the labour market”, who represent 14% of the NEET total. These are mainly young parents (88%) or people living with a partner and not looking for work, mostly women (86%) with few qualifications. This category of NEETs had the most resources in 2014, with EUR 8,470 on average. However, they are also the group that least often live with their parents (14%). “Short-term unemployed vocational education graduates” corresponds to 31% of all NEETs and is the largest group. NEETs in this group are largely holders of a CAP<sup>39</sup>, BEP<sup>40</sup> or vocational baccalaureate, are the most likely (81%) to have worked during the year and had an average of EUR 6,710 of resources in 2014.

Finally, the last category includes those with “no diploma far from employment” (20% of all NEETs) and are the “most vulnerable NEET” according to INJEP. Most of the NEETs in this group have never worked (77%) and yet have been actively looking for work, some (54%) for more than one year. Furthermore, 27% of them are “limited in their autonomy by a health problem”.

Without a diploma for 70% of those in this group, they had on average only EUR 2,810 of resources in 2014 and are the most likely (91%) to live with their parents. Their “very unfavourable situation on the labour market (...) is not compensated for either by social assistance or by the income of parents who are themselves in difficulty”, observes INJEP, which calls for better consideration of the “specific characteristics of these people” in the targeting of youth policies.

---

<sup>39</sup> The term CAP stands for Certificat d'aptitude professionnelle, which is a French diploma of secondary and vocational education.

<sup>40</sup> The term BEP stands for Brevet d'études professionnelles, which is a step in the three-year professional baccalaureate curriculum.

## CHALLENGES AND BARRIERS FOR NEETS

The “1 youth, 1 solution” plan aims to respond to the unprecedented crisis born in the context of the COVID-19 pandemic, which coincided with 750,000 young people entering the job market. The plan is structured around three axes:

- Facilitating entry into working life;
- Guiding and training 200,000 young people in the sectors and occupations of the future;
- Supporting young people who are far from employment by building 300,000 customised integration paths.

The plan is financially supported within the framework of the post-COVID recovery plan, with the activation of the national and European funding of the recovery plan, and in particular the complementary envelopes of the ESF.

Several measures that existed in previous school dropout prevention plans and national training plans have been reinforced under the “1 youth, 1 solution” scheme, and new ones have been added. To help young people find their way through the myriad of measures deployed, an online tool has been created by the Ministry of Labour called 1jeune1solution. It is a platform that connects employers with potential employees and provides access to news and current training information.

To help young people enter the workforce, a series of measures aim to strengthen youth employment, such as financial aid for employers who hire young people under the age of 25, or an exceptional bonus for companies that recruit a student on an apprenticeship or professionalisation contract, particularly for companies with fewer than 250 employees.

There are also several programmes aimed at helping young people improve their skills in order to enter the job market. One of them is Pix, which was initiated by the French government in 2016. Pix is a non-profit structure established as a Public Interest Grouping with the mission of supporting the rise in the general level of digital skills. Its target group consists of young people in and out of the school system and people who are looking for a job and need training for their digital skills. The objectives are to assess and develop digital competences in 5 areas, 16 skills and 6 levels of practice for each of them:

- Information and data;
- Communication and collaboration;
- Content creation;
- Protection and security;
- Digital environment and problem solving.

Pix offers fun challenges and real-life scenarios. Learners manipulate files and data, investigate the web, and answer digital literacy questions. From beginner to advanced, the questions are personalised and adapt to the level of the user, answer after answer. Depending on the results, online tutorials are recommended to help learners progress. To pass the Pix certification, once someone is certifiable, they must go to an approved certification centre. Currently, there are only Pix certification centres in France; however, centres in other countries will soon be established. The centre welcomes candidates and provides them with the equipment and material resources appropriate for setting up the certification session. Currently, it is not possible to take the certification remotely.



There is a certification fee to cover the costs of organising the sessions. Each centre is free to set its own rates, but Pix recommends a maximum cost of EUR 45.

Another programme focused on digital skills is Emmaüs Connect. This programme fights against economic insecurity and social exclusion. The Emmaüs Connect project is the digital academy, aimed at supporting anyone in a situation of economic or social fragility or at risk of marginalisation. The programme allows people in precarious social and digital situations to access online tools. According to Emmaüs Connect, being cut off from the Internet today means being excluded from the basic services of daily life, away from work, away from social connections. The Emmaüs Association focuses on three aspects of digital insecurity: access to equipment, access to means of connection and support towards essential skills. The Association also offers training and tools to social actors and public service operators to transmit its methods with the ambition of scaling up in digital inclusion throughout the territory.

Additionally, an online course – a MOOC<sup>41</sup> – “A la découverte des métiers de la transition écologique” (“Discovering the jobs in the ecological transition”) was created. Its primary target audiences are high school students who receive quality information and tools to enable a thoughtful reorientation process, as well as high school educational teams, those returning to school, and parents of students.

The MOOC aims to offer an overview of the jobs in the green transition through testimonials from professionals and providing an overview of the associated training paths. It aims to provide a better understanding of the heterogeneous fields, the diverse professions covered by the green transition and the different training paths to access them, with the ambition of helping high school students find their way around thanks to a set of MOOCs.

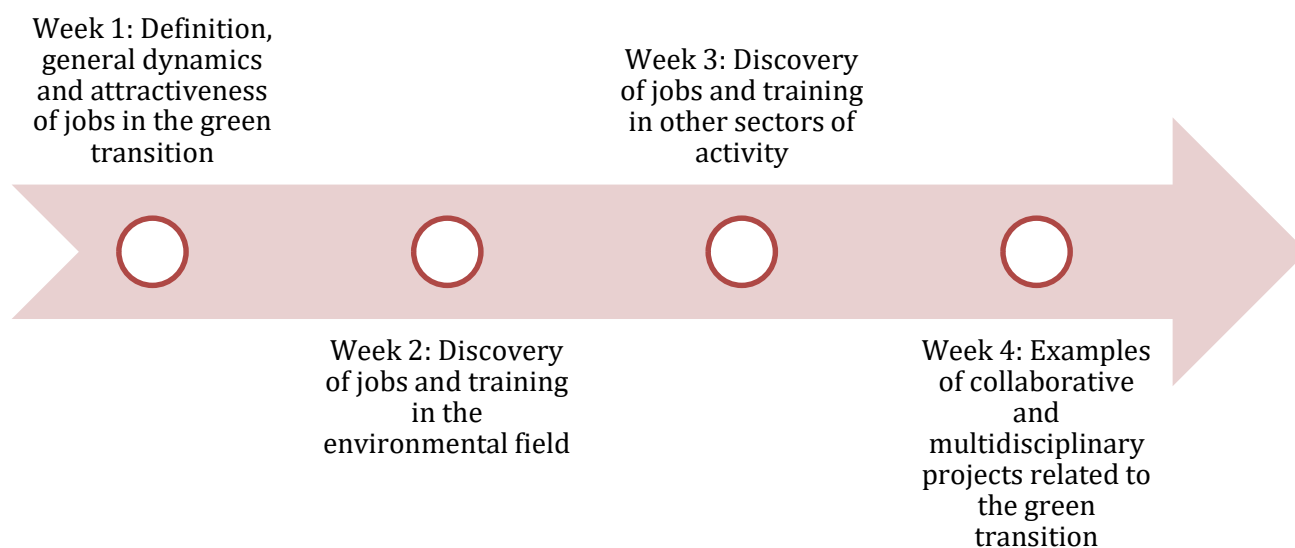
This online course involves many professionals from different backgrounds. There are testimonies from experts, videos of professionals from sectors historically concerned with the green transition (e.g., water, waste, environmental protection, and energy) but also testimonies of professionals from sectors strongly impacted (or likely to be) by the green transition (e.g., agriculture, transport, and construction).

*Figure 7. The learning plan of “A la découverte des métiers de la transition écologique”*

---

<sup>41</sup> A MOOC is an online course aimed at unlimited participation and open access via the internet. In addition to traditional course materials, such as filmed lectures, readings, and problem sets, many MOOCs provide interactive courses with user forums or social media discussions to support community interactions among students, professors, and teaching assistants, as well as immediate feedback on quick quizzes and assignments.





Source: France Université Numérique, 2022.

## 5. ITALY

### STATISTICAL ANALYSIS OF THE NEET POPULATION IN ITALY

Since 2015, Italy is the EU country with the highest NEET rate among the 15-29-year-old group. Unlike several other EU countries, in the second half of the 2010s, Italy did not achieve a substantial reduction in the NEET rate through active labour market policies, among which is the Youth Guarantee programme.

The National NEET Plan, published by the Italian government in March 2022 provides an updated description of the composition and the characteristics of this group.

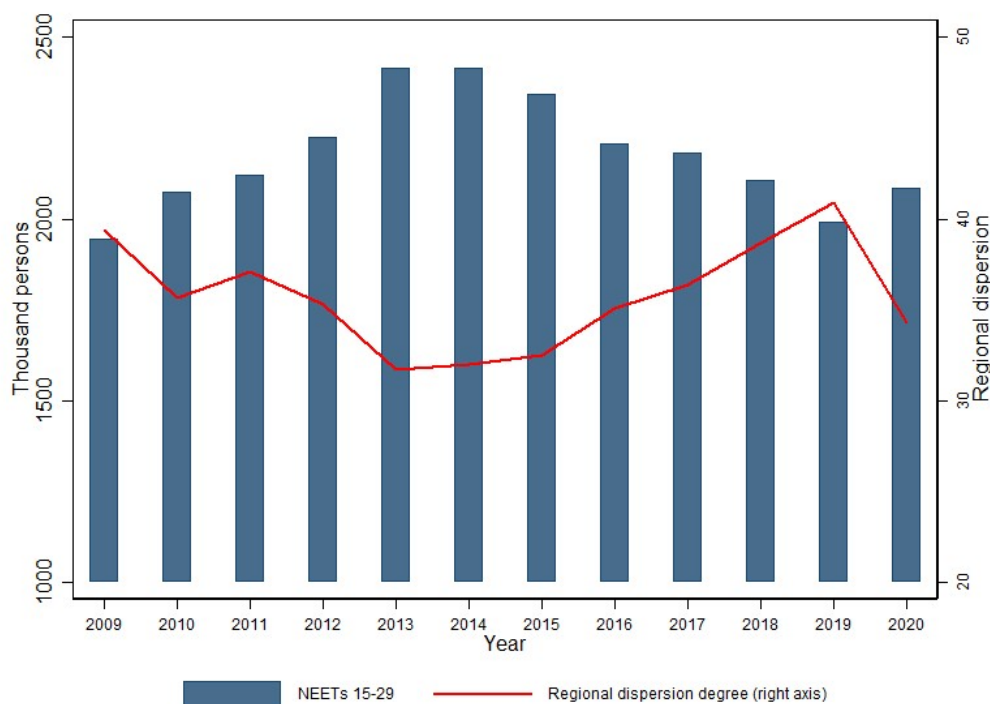
There are two main aspects to characterise the national phenomenon of NEETs: the first is the presence on the territory of fewer young people than in other European countries, as a consequence of the low birth rate; the second concerns the difficulties in accessing the labour market and the poor valorisation of human capital in the Italian production system.

In 2020, the Italian NEET rate in the age class 15-29 is 23.5% against the EU-27 average value of 14.0%. The number of NEETs is 2.1 million (+97,000 compared to 2019). The effect of the COVID-19 pandemic has reversed the downward trend that began after the peak in 2013 and 2014 (see Figure 8, the bar chart on the left axis).

In Italy, it is often the case that the measurement of an indicator at the national level hides large regional differences, to the point that reducing regional disparities has been indicated as a key priority in the Recovery and Resilience Plan (RRP). This also happens for the count of the NEETs. In Figure 8, the degree of regional dispersion in the number of NEETs is measured on the right axis: the higher the degree, the larger the between-regions differences in the number of NEETs. The downward trend in the number

of NEETs from 2014 to 2019 was accompanied by an increase in the disparity between regions. In other words, the more the number of NEETs decreased at the national level, the more the differences between regions increased. In 2020, conversely, the degree of heterogeneity between regions decreased in conjunction with the rise in the number of NEETs. The presence of marked regional differences but also the coexistence of depressed and more developed areas in the same regi. on requires the planning of specific interventions for the labour market of local areas.

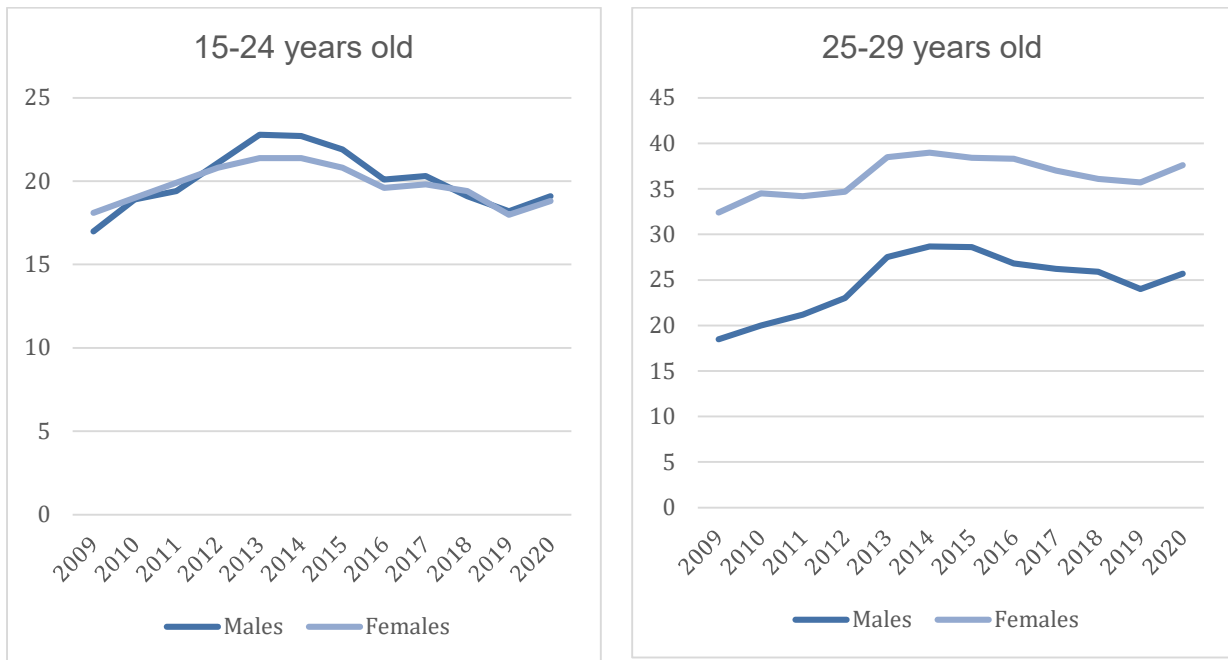
Figure 8. NEETs (15-29 years old) and regional disparities



Source: Eurostat database [lfsi\_neet\_a, lfst\_r\_edatd\_22]

When the age groups 15-24 and 25-29 are analysed separately by gender, an apparent gender issue emerges in the NEETs rate among the older young. For the females in this group, the share of NEETs in the total population is stably higher than for males: the gap amounts to about 10 percentage points (Figure 9, right panel). In 2020, among the young aged 25 to 29 years old, the NEET condition affected 35.8% of females and 24.0% of males. Conversely, the differences in values between males and females in the age class 15-24 are much smaller, below 2 percentage points in the last years (Figure 9, left panel).

Figure 9. NEET rates by age class and gender, 2009-2020



Source: Eurostat database [lfsi\_neet\_a]

This finding highlights the high difficulty for women aged 25-29 to successfully enter the labour market, which is likely to determine the acceptance, if not the choice, of a condition of inactivity. This calls for policy interventions targeted explicitly for the females of this age class to relieve them of the main care responsibilities for children or dependent adults in their family and let them achieve a better work-life balance.

The gender disparity in the share of NEETs among the older young is also confirmed in the central regions of Italy, which include Tuscany, Lazio, Umbria, and Marche. In particular, the rise in 2020 brings the female rate back to the level of its highest values in 2014-2015 (approximately 33%). In the same year, the male rate rises to 21.5%.

With reference to the characteristics of NEETs in Tuscany, the Regional Institute for Economic Policy and Research (IRPET) analysed the temporal evolution of the consistency and composition of young people under 30 in Tuscany from 2008 to 2019.

Although the size of the population in the age class 15-29 has remained almost constant at approximately 500,000 persons, the composition of the group has undergone a notable change: the share of inactive and unemployed young people rose by 43% and 30%, respectively, whereas, on the contrary, the percentage of employed people decreased by 19%.

## SECTORAL NEEDS

As part of two other EU funded projects (INTERCEPT and LifeSkillsVR), the Fondazione Polo Universitario Grossetano has conducted qualitative surveys aimed at identifying the perception of the main stakeholders on the two subjects and the relation to youth unemployment. Although the survey is limited in terms of scope, target and territory and cannot be representative of the whole situation in Italy, there are relevant elements that have emerged and that can be pointed out.

The survey conducted on digital skills as part of the LifeSkillsVR project addressed both youths and employers who agreed that:

1. The most commonly needed life-skills for a job role are:
  - a. Defining and solving problems;
  - b. Managing time;
  - c. Applying technology;
2. The skills that youth are currently lacking for their preferred job are:
  - a. time management;
  - b. design skills;
3. Youths' interests, although employers think that youth are moved especially by money, relatives and parental pressure, while for youth these are the least selected motivations, with enjoying the career work tasks rated first together with their interests.

Both employers and youth find that specific training, job exposure, internships and lifelong learning are crucial to gain experience and address both the acquisition and the consolidation of youth's skills. In general, six key life skills for employment were identified: time management, problem solving, developing and managing self/oneself, communication, teamwork and physical-mental health.

Within the INTERCEPT project, a survey was addressed to the stakeholders in the labour market, including the private sector, training agencies, job placement agencies and economic sector representatives, to identify their perspectives in the labour market in relation to green jobs.

The respondents think that the main impacts of the green transition on training and employment needs are strongly related to the acquisition of new skills and the upgrading of existing skills for all levels of occupations. Low-skilled occupations are the ones considered to be most in need of the acquisition of new skills. The stakeholders do not seem to be worried by the erosion of employment in general.

Three soft skills have been identified as the most important for green jobs by the stakeholders in the labour market: problem solving, collaboration and digital skills. These are followed by motivation, then flexibility, communication and skills to operate and maintain technology. Creativity and critical thinking are considered to be moderately important, while care skills and design and system thinking seem to be the least important.

The stakeholders were asked to identify the occupations that they believe will be required in specific sectors in relation to the green transition. Their answers include:

- Renewable energy sector: designers, installers, maintainers of technologies, technical experts, certifiers of green systems and renewable sources and experts in waste management; bio-architects, engineers, environmental engineers, technicians – mechatronic engineers and project managers.
- Agriculture, forestry and agri-food: recovery and reuse of processing waste to produce energy, organic farmer, digital breeder, green project financier, experts and agronomists specialised in precision agriculture and organic certifications, biologists, project managers, environmental impact assessors and certifiers, technicians specialised in combining environmental conservation with production, agro-informatics, high-tech farming machine operators, reforestation, forest and land maintenance experts, and ancillary works for renewable energy production.
- Resource management: researchers, green lawyers and accountants, experts in bio-informatics, project managers, analysts, LCA analysts, systems engineers and programmers, energy and

green managers, mobility managers, energy certifiers, technicians for the optimisation of energy efficiency and waste reduction, experts in the use of online platforms, experts in the design of renewable resources, biologists, agronomists, foresters, qualified technicians, and experts in the circular economy.

- Construction and building: installers, materials technicians, experts in green building, experts in agro-energies, designers specialising in sustainable construction, experts in bio-architecture, engineers with high-grade green skills, experts in bio-architecture and green building, technicians for the optimisation of energy efficiency, green managers, environmental engineers, bio architects, eco-friendly product suppliers, material manufacturers, experts to adapt existing buildings to new standards, qualified technicians, bricklayers, and engineers.
- Manufacturing: experts in automation and energy saving systems of machines, environmental impact managers, experts in mechatronics, researchers for the reduction of environmental damage, experts in the circular economy, technicians of the production and assembly of new materials for the nautical sector, designers of recyclable materials, skilled labour, LCA analysts, engineers, managers, AI programmers and robot engineers, environmental consultants, environmental chemists, experts in the reconversion of production processes in a green sense, and experts in the development of low impact machinery.
- Transportation: preparation, maintenance and recharging of electric vehicles, electrical network installers, project managers, experts in transport logistics, experts on hydrogen, mobility managers responsible for the management of the nautical supply chain and the life cycle of the yacht, IT experts for the creation and management of remote monitoring systems for road infrastructure and safety, skilled workers, drivers, engineers, drivers of high-tech electric vehicles, experts in the optimisation of transport networks and the improvement of the efficiency of carriers, qualified mechanics.
- Tourism and hospitality: hiking-environmental guides, cycling tourism experts, environmental guides, agricultural entrepreneurs, eco and green chefs, ecological marketing experts, sustainable tourism experts, green travel designers, mathematical and computer science specialists to develop the digitisation of tourism services, sustainable tourism operators, communication and marketing experts, and territorial marketing experts.
- Services: marketing and communication managers, experts in the circular economy and recycling, booking management, IT specialists, engineers, green accounting specialists, environmental lawyers, environmental impact assessors, energy managers, green orientators, green educators, highly specialised technicians creating and identifying good practices, IT facilitators to help citizens with new technologies that will replace many face-to-face activities, design and execution of green environments and processes, gardeners, designers, qualified technicians, and logistics experts.
- Extractive industries: recovery and recycling experts, surveillance and control experts, consultant on environmental impact, environmental chemists, project manager, efficiency technician, engineers, geologists, experts in renewable energies, energy managers, green managers, experts in technological innovation for the use of renewable sources, suppliers and experts in eco-sustainable materials with a low environmental impact, experts and designers in the innovation of low-impact extraction processes, and technicians for the redevelopment of extraction sites.

## CHALLENGES AND BARRIERS FOR NEETS

Among the young (under 30 years) employed, job quality has deteriorated due to the increase in the shares of fixed-term and collaborative contracts and involuntary part-time employment. Precarious employment and poor working conditions for the young employed are also relevant for the unemployed and inactive group as they might directly impact their motivation to find a job.

In addition to the deteriorating working conditions, the 2022 NEET Plan identifies a number of additional obstacles for NEETs to find a job, namely:

- Have a low level of academic achievement;
- Live in a low-income family;
- Come from a family where one parent has experienced periods of unemployment;
- Growing up with only one parent;
- Be born in a country outside the EU;
- Live in a rural area;
- Have a disability.

The relevance of such obstacles for NEETs to find a job is also confirmed by a qualitative analysis conducted by Polo and ANCI with local stakeholders whereby it emerged that there are three large sets of impediments: lack of quality job opportunities that are consistent with the qualifications of the young and that are located in the area of residence; lack of skills for entering the labour market; and lack of stimulation, motivation, and confidence in their abilities, leading to apathy and discouragement.

In particular, the survey conducted by Polo Universitario Grossetano as part of the LifeSkillsVR Project identified the following main barriers:

- Economic: cost of college attendance, non-correspondence with aspirations, inadequate remuneration for higher educational qualifications (e.g., degree versus diploma) in SMEs, low salary;
- Religious discrimination;
- Disabilities: discrimination in many sectors and job positions;
- Parental: expectations of the family, parental opposition to job choices for low-skilled jobs, not happy with the work;
- Equity: difficulty in harmonising work commitments with family aspirations, women are still discriminated against men in many job positions, fewer opportunities for women, lower wages for women;
- Other: poor quality of training.

An OECD study<sup>42</sup> carried out in 2019 shed light on the main characteristics of the Italian labour market, particularly concerning Active Labour Market Policy (ALMP) and disadvantaged groups, and the most important elements that emerged are:

- Italy spent a percentage of GDP on active labour market policies, which is just below the average spending among OECD countries (0.53% of GDP);
- Italy's budget on active labour market policies is skewed toward measures that are more susceptible to suffering from large deadweight losses as half of the budget for active labour market policies is

---

<sup>42</sup> OECD, 2019.



devoted to employment incentives. More than one-third of the budget is devoted to training measures, though mostly in the form of reductions in social contributions for employers during apprenticeships programmes;

- ALMPs in Italy serve a similar purpose as the passive measures. Two-thirds of active measures are used to subsidise new employment relationships, while 40% of spending on passive labour market policies are used to subsidise continuing employment relationships;
- Only about one-half of unemployed persons in Italy are registered with the public employment service (PES), a lower share than in most other OECD countries. Moreover, the public employment service is not a popular channel for seeking employment: only half of the registered unemployed use these services to look for work, a low share relative to the situation in other OECD countries. Jobseekers are reluctant to use PES services as the access to active measures is low and often perceived to be of low quality.

These elements contribute to increasing the labour market challenges, particularly for disadvantaged groups.

1. Women still face greater challenges than men in the labour market. The participation rate of working-age women, at 56% in 2017, remains almost 20 percentage points below that of men despite rising by over 10 percentage points in the past two decades. To promote further much needed progress in addressing gender gaps in the labour market, significant improvements are needed in the provision of caretaking facilities for children and the elderly and better targeting of active labour market policies to support women's labour market prospects.
2. Young people were hit hardest by the financial crisis in Italy. The unemployment rate of 15-24-year-olds stood at 43% at its peak in 2014. The labour market situation of youth has improved only mildly during the recovery.
3. Long-term unemployment remains high in Italy. Long-term unemployed persons accounted for 59% of all the unemployed in 2017, second highest – together with the Slovak Republic – among OECD countries, just behind Greece. The share of the long-term unemployed in the labour force was 6.5% in 2017 (for the population aged 15-74), versus 3.4% for the EU countries.
4. Female participation has improved considerably, but labour market prospects for women are still lagging behind those for men. A high share of young people neither in employment nor in education and training and high long-term unemployment also constitute obstinate challenges.
5. A low level of skills characterises Italy's labour market. The share of working-age adults with a tertiary degree is low compared to other OECD countries, and the skill levels tend to be relatively low at all levels of educational attainment. In addition, there is a high incidence of mismatches on the labour market, which further contributes to low productivity and low incentives for individuals to invest in education.

## GOOD PRACTICES CONNECTED WITH PROGRAMMES FOR NEETS

The Resilience and Recovery Plan (Next Generation EU) is the main instrument that the Italian government is using to change the economic structure and have a stronger impact on society and the economy. Italy is the major recipient of Next Generation EU with EUR 195 billion, which is complemented by EUR 30 billion of national funding, hence providing nearly EUR 230 billion of investment funding for the upcoming five years.

Within the six priorities of the Italian Plan, digital and green transitions are the most important as together they absorb over 50% of the funding. In addition to the investments, the Recovery Plan also envisages a number of policy and legislative changes to ensure the sustainability of the investment and a higher impact. In 2020, Italy ranked 25th in Europe in the DESI (Digital Economy and Society Index) and the set of reforms being discussed and implemented are aimed to address this gap.

The National Digital Strategy (Italia Digitale 2026) is one of such policy instruments connected to the implementation of Next Generation EU that wants to strongly address the digital gap within the population. To this effect, the Strategy envisages a number of initiatives targeting citizens of all ages in order to achieve the 70% of the population that is able to use digital devices and programmes. Additionally, specific measures provide support to the vulnerable population, such as the creation of local digital animators in charge of supporting and mentoring local citizens, especially disadvantaged groups and elderly. This strategy complements the substantial investment that the Italian government is carrying out on the digitisation of the public administration, which will shift most of the services to citizens to digital platforms. It does not have a specific focus on NEETs nor a specific link to employment, as the strategy mainly underpins the digitisation of the public administration and prevents the externalities that this might cause on the population.

As part of the reforms envisaged by the Italian Resilience and Recovery Plan, in December 2021 the government approved the National Plan for New Skills, with “the aim of reorganizing the training of workers in transition and unemployed, through the strengthening of the vocational training system and the definition of essential quality levels for upskilling and reskilling activities in favor of the beneficiaries of support instruments. The Plan also integrate other initiatives, concerning measures in favor of young people such as strengthening the dual system addressing NEETs, as well as actions for adult skills”.

A New Skills Fund is created to allow companies to reshape working hours and to encourage training activities based on specific collective agreements with trade unions. The Skills Plan has three main reference targets:

1. Unemployed people and beneficiaries of active and income support policies;
2. Young people;
3. Employed people.

Also, the digital transition is addressed as digital skills are identified as transversal skills to the targets themselves. In fact, more than 55% of individuals between the ages of 16 and 74 are still missing basic digital skills compared to an EU average of 44%. The lack of these digital skills is caused by two groups of factors: the low level of education of the Italian population and the important share of elderly population.

In relation to the three target groups, three main initiatives can be identified that find specific funding within the resources of Next Generation EU, and, in particular:

1. GOL Program;
2. Investment in the dual system;
3. The New Skills Fund.

There were also several programmes conducted with a focus on NEETs in specific regions. One of them is Progetto ConNEETtori based in Tuscany. The focus of the project was on NEETs in the 15-24 age range and at high risk of social exclusion. Statistics on NEETs often cover a wider age range (up to 35 years of

age); although this was not the key target of ConNEETtori, the project also delivered some actions targeting older NEETs.

ConNEETtori's innovative training strategy allowed participants to develop greater self-awareness and to identify their transversal skills, which could be used to get out of their NEET condition and face the difficulties of an extremely complex labour market. Its main elements were:

- Use of social networks and local newspapers to reach out to NEETs and get them involved;
- Internships and training courses to improve professional skills;
- Meetings to develop their soft skills and transversal skills mapping;
- Volunteering and active citizenship experiences in sport, cultural and social sectors;
- A "NEET parliament day" to allow youngsters to design their path using a bottom-up approach, while representing their key resources and limitations;
- Networking strategy to keep local and regional administrations together and create synergies on common policy objectives to reach out to NEETs;
- Getting to know the local context through meetings / interviews with representatives of productive sectors;
- Use of theatrical techniques and practical exercises;
- Use of WhatsApp chats to allow for a continuous exchange of information on work.

One more example with a regional focus is *Un nuovo Il a Il atua vita* also conducted in the Tuscany region. It was targeted at 18-29-year-old NEETs. In this programme, there are 132 training courses, each of which is intended for a maximum of three people. This is offered among the opportunities promoted with *GiovaniSi*, the regional project for the autonomy of young people. The courses will allow an individual or individualised approach, and therefore more appropriate to respond to the specific needs of the students. Central will be the role of the services of the employment centres, which will provide support to young people to learn about the different paths, enrol in the Youth Guarantee programme and access training hours.

Another programme for supporting narrowing the skills gap is **Progetto EGREJOB**, run between 2013 and 2015. It was focused on public and private institutions and stakeholders in the green economy sector, as well as young people under 35 years of age. EGREJOB aimed at narrowing the "skills – unemployment" gap in the green economy sector to enhance young and decent employment and boost the competitiveness of the involved territories. The project built a Euromed incubation system of skills in the green job field that resulted in:

- Easing entering into the labour market for young people, and women in particular, within decent conditions;
- For public authorities, catching green jobs opportunities to implement labour policies with high occupation potential within "decent" conditions;
- For the Mediterranean Systems of the concerned territories, linking the youth unemployment issue together with green job opportunities towards the development of the territories.

The project analysed the development prospects of green work in the various countries involved (Italy, Spain, Tunisia, Lebanon) and dealt with the training of the various professional figures and raised awareness on the strategic importance of the green economy at a social and political level.

EGREJOB did not target the NEET phenomenon in a specific way, but it trained 100 young people – half of them being women – from Italy, Lebanon, Spain and Tunisia in fields such as renewable energy, eco-building, energy efficiency, sustainable agriculture, eco-tourism and waste recycling. This was done to foster the integration of a new generation of students and entrepreneurs in the green job market.

Another example is NEET Working, which is the 2022 national plan to support NEETs in Italy, approved by the Ministry for Youth Policies and the Ministry for Labour and Social Policies, which is being implemented from March 2022. It is targeted at 15-34-year-old NEETs in Italy. However, based on the documents available at the moment, the plan does not seem to be focusing on the NEET phenomenon in terms of age or gender segments / sectors of employment.

Among the key tools which will be used for the plan implementation are:

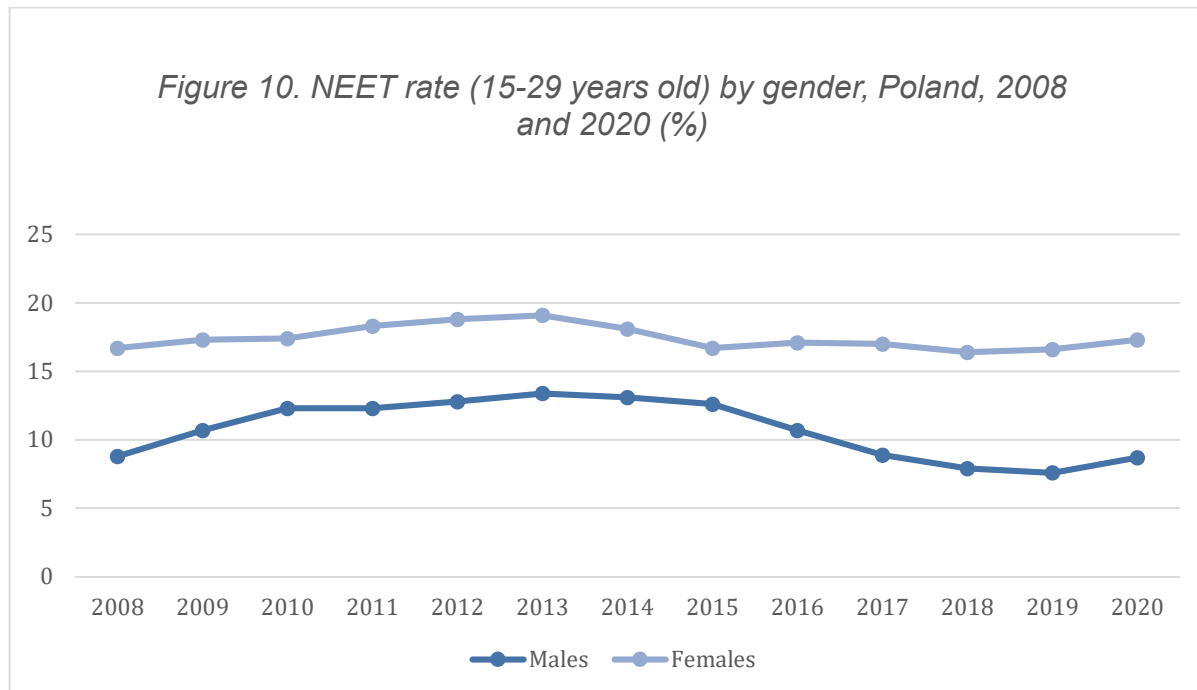
- Reinforced Youth Guarantee: refinanced, strengthened and improved within the new National Operational Programme “Young people, women and work” 2021-2027;
- Permanent and reinforced governance to create synergies between existing and upcoming schemes, such as the new Employability Guarantee for Employees;
- Youth Centres at PES offices funded by the 2022 Budget Law to give support to young people at risk of social and / or psychological distress;
- Itinerant information campaign of the Department for Youth Policies and Voluntary Service (first half of 2022): it will involve approximately 10-12 cities identified as those with the highest presence of young people in NEET condition. A truck will stay for half-days in each municipality, stationed in urban areas with the highest rate of school dropout and / or youth unemployment. It will be a place where young people can get in touch with the local PES, create their CV, take a job interview, register for a training course / Voluntary Service / Youth Guarantee Schemes, access national or regional incentives and subsidies, or obtain a digital identity to communicate more effectively with the public authorities;
- GIOVANI2030 (G2030): an online platform created with the aim of becoming the single point of access for young people aged 14 to 35, to all useful information to guide their future choices in the field of training, volunteering, of work, international and cultural initiatives, throughout the national territory;
- The European programmes managed by the National Youth Agency (NYA): Erasmus+, European Solidarity Corps, NYA’s Multiannual Plan 2021-2027 on the inclusion of young people with fewer opportunities in Erasmus + and European Solidarity Corps;
- Youthpass and Europass for the recognition of the formal and informal skills of young people.

## 6. POLAND

### STATISTICAL ANALYSIS OF THE NEET POPULATION IN POLAND

The NEET rate in Poland for young people aged 15-24 was estimated at 9.0% in 2008, 12.2% in 2013 and 8.6% in 2020. Continuously over the years, it is below the EU average. The situation was worse for young people aged 25-29. The NEET rate for this age group has not changed significantly between 2008 and 2020, fluctuating around 20%. In 2008, it was 19.3%, in 2013 – 22.7% and in 2020 – 19.4%.

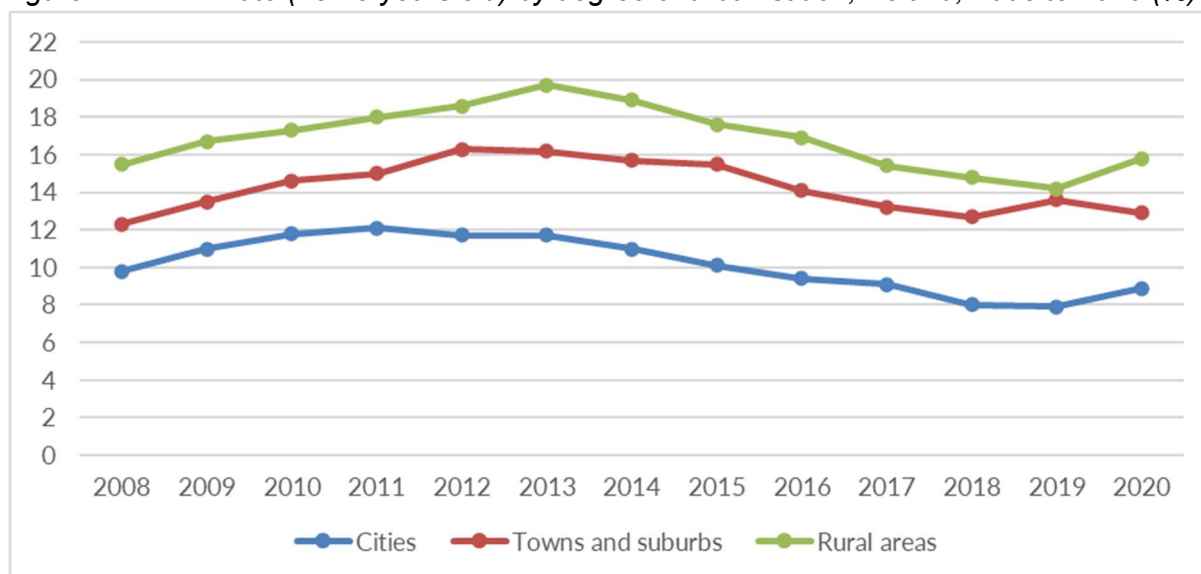
The issue that needs to be addressed is the higher NEET rate among women than among men. The gap regarding gender was 7.9% in 2008, 5.7% in 2013 and 8.6% in 2020. The lowest value was reached in 2015 (4.1%). Since 2015, we have seen an upward trend. This can be linked to the steady decline in the NEET rate for men, from 13.4% in 2013 to 8.7% in 2020. For women we have not observed significant changes, from 2008 to 2020 the NEET rate was about 17%.



Source: Eurostat database [EDAT\_LFSE\_20]

Differences regarding the NEET rate are also related to the degree of urbanisation. The NEET rate is higher in rural areas and towns than in cities. Between 2008 and 2013, the NEET rate gap between cities and rural areas increased from 5.7% to 8.0%. From 2013, it has been slowly decreasing, but generally the gap has been quite stable for more than ten years.

*Figure 11. NEET rate (15-29 years old) by degree of urbanisation, Poland, 2008 to 2020 (%)*



Source: Eurostat database [EDAT\_LFSE\_29]

As regards the level of education, the highest NEET rate can be observed among people with a low level of education. In 2020, for people aged 20-24, it was 34.4%, and for older people aged 25-29 – 56.1%. For years, nothing really has improved in this situation.

## SECTORAL NEEDS

The labour market transformation driven by pandemic-induced change has accelerated significantly. The coming years are likely to see a continuation of the trends observed, especially skilled workers and increasing wage pressures.

In Poland, the green labour market is only just warming up and for the time being it is visible mainly in the power industry. As estimated by the Polish Wind Energy Association, in 2020 13,000-17,000 people will work in this sector (together with related sectors), and in the following years this number may increase even up to 97,000.

The importance of the ICT sector in the Polish economy has been growing for years. In 2019, the ICT sector accounted for 3.62% of the Polish GDP. Over 2,400 enterprises were in the ICT sector in 2020. Compared to 2017, this number increased by more than 10%. As for the number of employees, the ICT sector employed almost 270,000 people in 2020, and this number increased by more than 14% from 2017. Every year, the number of employees is increasing by more than 3%.

According to the Polish Economic Institute, Poland was 18th out of 27 EU Member States in the ranking of the indicator measuring the development of the green economy in 2011-2019. Poland faces many challenges in terms of transition towards a green economy, such as great reliability on fossil fuels of the energy and utility sector and high levels of air pollution.

Data from recruitment portals and employment agencies shows that even in industries that, like IT, are doing well during the pandemic, employers are primarily looking for specialists. Of all the jobs published in 2020, only 5% were targeted at people starting out in IT (juniors). Quality and productivity have become even more important. As experts from Inhire, an IT recruitment platform, add, companies working remotely have neither the opportunity nor the time to teach and implement inexperienced candidates<sup>43</sup>.

## CHALLENGES AND BARRIERS FOR NEETS

For years, Poland has been at the far end of the EU regarding digital skills. In 2021, Poland ranked 24th out of 27 EU Member States in the Digital Economy and Society Index (DESI). In 2020, Poland ranked 23rd. In recent years, digital skills in society have improved, but it has not been a significant improvement. The percentage of people with at least basic digital skills increased from 46% in 2017 to about 50% at the end of 2020.

The Supreme Audit Office (NIK) conducted an audit between January 2018 and October 2021 in order to check what actions were taken by public administration organisations to improve the digital competences of the society. According to NIK, several bodies, including the Chancellery of the Prime Minister, two

---

<sup>43</sup> Uniwersytet Adama Mickiewicza w Poznaniu, 2021.



ministries and municipalities, have made efforts to increase the digital skills of the society. Therefore, there is no single agency in place to coordinate, monitor and support other entities in their efforts<sup>44</sup>.

In 2020, more than 75% of NEETs were economically inactive. This means that in many cases finding a job is not the main problem – most NEETs are not looking for a job or are unable to take a job for various reasons. Reasons for not searching for a job vary between men and women. The main reason for women is difficulty in balancing family commitments and professional obligations. In many cases, women prefer to provide personal childcare and it is their choice not to combine this with work. In 2018, as many as 58% of women in the NEET group said that they are not looking for employment because of their care duties, 26% gave other personal or family reasons, and only 8% said that the problem is their illness or disability. For men this was the main reason, as many as 43% of men listed illness or disability as the cause for not searching for a job. Personal and family reasons were given by 31% and discouragement by 14%.

NEETs in Poland can be characterised as people who used to work mainly without a contract or on the basis of contracts for specific work or commission and who come from rural areas or smaller towns and have secondary or lower secondary education<sup>45</sup>. Although the share of young people in the NEET group in Poland is not the highest in the EU, Poland belongs to the group of countries where the NEET population is relatively high. Therefore, it is emphasised that this problem should be taken very seriously. The situation of NEET young people in Poland is uneven. Taking into account the size of the NEET group in each province, it can be observed that the most difficult situation is in Podkarpackie, Lubuskie and Warmińsko-Mazurskie Voivodeships, while the best situation is in Mazowieckie, Podlaskie and Łódzkie Voivodeships<sup>46</sup>.

Most of the NEETs are not supported by labour offices, so it is difficult to reach them. Outside the registers of public employment services, there are about 70% of young people who are not working or studying. This percentage is also high in other EU countries. State activities aimed at counteracting unemployment are carried out to a large extent by employment offices. They support young people in gaining professional experience and improving their qualifications. However, labour offices are also failing to reach a large proportion of the unemployed, i.e., job seekers. 43% of the young unemployed from the NEET group remain outside their registers. These people could benefit from support, as labour offices have much to offer them, but some of them may not know about the possibility of obtaining help, and others may have difficulties in getting to the nearest office – especially those living in rural areas and small towns. Labour offices are most often located in county towns. Not all of the unemployed have the time or money to travel there, so they look for work on their own, through family or friends<sup>47</sup>.

## GOOD PRACTICES CONNECTED WITH PROGRAMMES FOR NEETS

On 30 April 2021, Poland's Recovery and Resilience Plan was approved at a special meeting of the Council of Ministers. In May 2021, it was presented to the European Commission. Poland is applying for over EUR 12.1 billion in loans and EUR 23.9 billion in non-repayable support from the Recovery and Resilience Facility (RRF), bringing a total of more than EUR 35 billion. These funds will be used primarily to finance projects related to climate transformation and digitalisation.

---

<sup>44</sup> Najwyższa Izba Kontroli, 2022.

<sup>45</sup> Mazowieckie Obserwatorium Rynku Pracy, *Diagnoza sytuacji młodych osób należących do grupy NEETs*.

<sup>46</sup> Saczyńska-Sokół and [Maika Łojko](#), 2016.

<sup>47</sup> Smoter, 2019.

The main challenges to be addressed by the RRP are:

- Improving the productivity of the economy;
- Unfavourable demographic trends – ageing population;
- Low – carbon transformation and becoming independent from coal;
- Digitalisation of the economy;
- Improving the quality of health services;
- Sustainable transport.

“Digital transition” is one of the key investment areas of the RRP and one of its assumed objectives is to increase the digital competence of the society. It is planned to adopt a Digital Competence Development Programme. It will include strengthening the management of digital competence, development of digital education and support of digital competences of citizens and employees of various sectors. It is aimed primarily at employees of public administration, enterprises, schools and educational institutions.

Another key investment area is “green transition”, but it does not include any plans to increase the green skills of the society. It mainly focuses on the energy transformation of the Polish economy and its main challenges.

There are also a number of programmes that do not target NEETs but are designed to encourage young people to develop competencies. There are interesting government initiatives aimed at young people to improve digital skills, for example:

- Leaders of Digitisation, which is an internship programme preceded by a competition, whose winners have the opportunity to serve a three-month paid internship at the Service Development Department in the Prime Minister's Office. The competition aims to select people who, as part of the internship, will have the opportunity to work on the most interesting nationwide projects such as the trusted profile, gov.pl portal, e-services and other tools that are used daily by tens of millions of Poles<sup>48</sup>.
- Academy for Innovative Applications of Digital Technologies (AI Tech) project. The goal of AI Tech is to develop a systemic model for educating high-level professionals in artificial intelligence, machine learning and cybersecurity. The programme provides access to training, internships, and mentoring programmes<sup>49</sup>.

## 7. MALTA

### STATISTICAL ANALYSIS OF THE NEET POPULATION IN MALTA

Economic growth is a prerequisite for increasing productive employment, particularly for youths, and hence the rate of economic growth sets the absolute ceiling within which growth in employment can take place. In Malta, the strong economic performance registered in recent years has been successfully reflected in employment growth figures. Malta has achieved record employment growth rates that have consistently outperformed European averages. On this account, Malta's employment activity rate has increased steadily over the years and has remained buoyant throughout the COVID-19 crisis. In fact, the employment

---

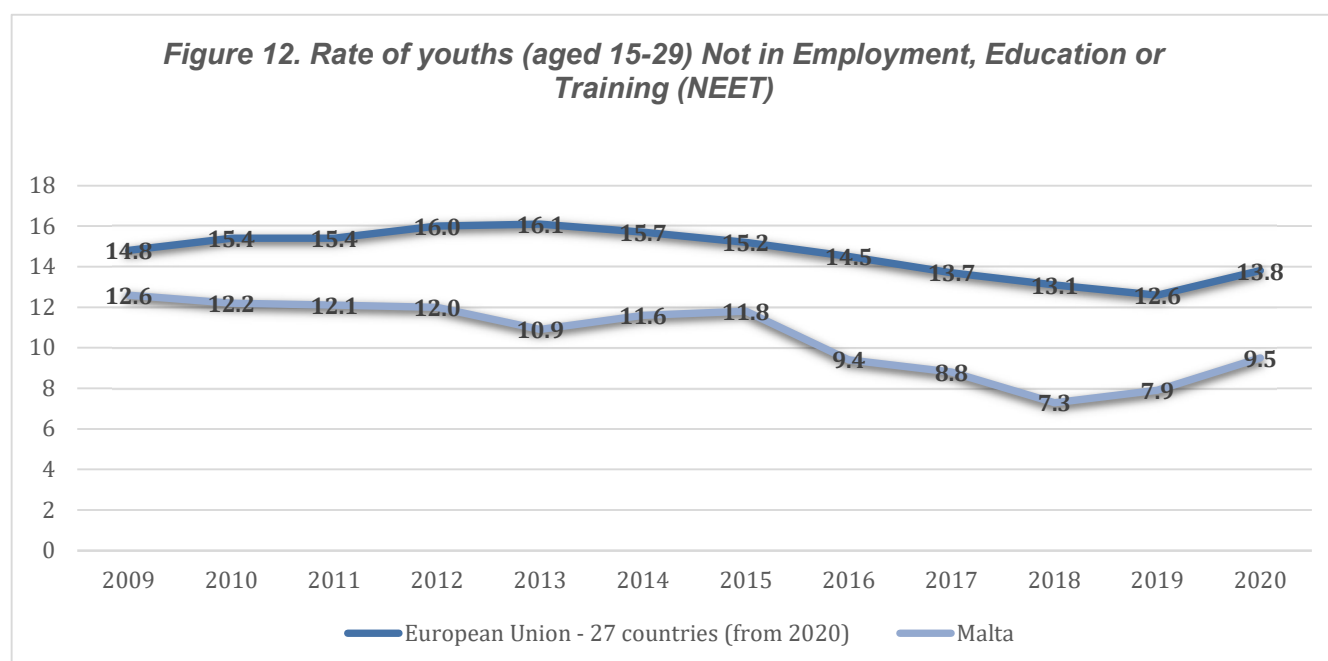
<sup>48</sup> Service of the Republic of Poland, *Digital Leaders*.

<sup>49</sup> Service of the Republic of Poland, *AI Tech*.

rate in Malta as at the end of 2020 stood at 77.3% (up by 0.5 percentage points over 2019) as opposed to 71.7% for the EU-27.

With employment achieving record highs, unemployment has been on a downward trend and reached record lows prior to the COVID-19 crisis. Malta consistently achieved some of the lowest rates in Europe and was at its natural rate of unemployment between 2017 and 2019. Significant reductions were also achieved in long-term unemployment.

Meanwhile, the rate of youths aged between 15-29 not in employment, education, or training (NEET) has hovered around 12.0% between 2010 and 2015 and improved considerably after 2015 on the back of strong labour market conditions and dropping unemployment levels. It eventually plateaued at 7.3% in 2018 and started increasing again, very much in line with the EU average, to reach 9.5% of the total population aged 15-29 in 2020.



Source : Eurostat database [EDAT\_LFSE\_20].

In absolute terms, this amounts to roughly 9,000 youths (Labour Force Survey), of which 5,100 are unemployed and the remaining 3,900 believed to be inactive.

In addition to favourable economic conditions, the increase in the employment population has also been the direct result of a very successful active labour market policy launched by the government through its 2014 National Employment Policy, including attracting females into the labour market. This has led to Malta closing the female participation rate with the European average which stood at 19.0 percentage points in 2010 and overtaking it by just over 1.6 percentage points in 2020. With the faster rate of growth in female participation, the gap also shrunk between the male and female activity rates, from 36.6 percentage points in 2010 to 17.8 percentage point in 2020.

This growth was mainly driven by a flagship policy that provided free childcare to returning mothers. Childcare responsibilities have long been identified as a critical barrier to labour market participation – 35.0% of all female NEETs aged 25-29 stated child rearing responsibilities as a main reason for not seeking employment, with a further 36.0% citing broader family-related commitment. This evidence and the subsequent results achieved through the free introduction of childcare services underline the importance of accessible childcare in activating the Maltese NEETs aged 25-29.

Notwithstanding the above positive developments, there remains room for improvement, especially in relation to a lack of participation within specific age cohorts and structural challenges in the field of educational attainment. For instance, the share of female NEETs aged 25-29 is disproportionately higher than that of male NEETs within the same age bracket. Although the proportion of females among the young Maltese population is less than half, females comprise over 64.5% of the Maltese NEET population aged 25-29. This observation aligns with the overall pattern of lower female labour market participation, albeit the significant progress registered over the past decade.

In line with international trends, low education levels in Malta are also pronounced among the NEETs cohort and typically associated with poorer labour market prospects. For example, while only 22.9% of the 25-29-year-old bracket have a low level of educational attainment (ISCED level 0-2), the incidence of low education attainment goes up to 51.8% when it comes to NEETs falling within the same age cohort. Conversely, only 12.8% of NEETs aged 25-29 years old have a tertiary level of education. Similarly, an analysis of unemployment figures over the last few years reveals that unemployment rates are more prevalent among those with low levels of education, across all age groups. Furthermore, the unemployment rate for those aged 25-29 years, which stood at 9.2% in 2020, was substantially higher than the overall average of 3.4%, signalling that youths who at best have an educational level of ISCED 2 are most at risk in the face of economic downturns.

Finally, social and motivational forces also have a strong direct bearing on the realities of NEETs and have been recognised to create major barriers to youths caught up in an inactive state of employment. According to the 2015 Youth NEET Census, more than half of the respondents claimed to be disinterested or demotivated by the current form of formal education and called for an improved delivery in basic skill sets. Research also showed that a significant amount of youths classified as NEETs were Core NEETs as opposed to Transition NEETs. Core NEETs are youths with social and behavioural issues, including youths who come from families where “worklessness” and unemployment is accepted as a norm, thus not much importance is given to further and higher education. Transition NEETs, on the other hand, are young individuals who choose to take time out before progressing onto further or higher education or employment opportunities. Such individuals tend to return to education, training, or employment, although it is unclear when this will occur and there have been instances where complacency kicks in, resulting in protracted inactivity.

The social dimension is further convoluted by situations where welfare systems fail in their active role to engage candidates into employment and instead serve to encourage individuals to remain on benefits indefinitely. The analysis carried out as part of the 2014 National Employment Policy concluded that the share of persons benefitting from Social Assistance (SA) or Single Unmarried Parents (SUP) benefits was at its highest within the age cohort of 20-28. This is usually the phase during which parents especially mothers with low levels of education have children. Moreover, the share of persons eligible for SA and SUP benefits that were in employment was negligible. This did not in itself imply a highly generous benefit scheme. Still, they had been unwilling to engage in the labour market as the structure of the benefit scheme did not encourage work. By way of example, in 2008, 45.0% of the 495 females applying for SA and SUP benefits were actively employed on the day of application for benefits. After 18 months, only 12.5%

remained actively employed. This is a clear example highlighting that benefit structures can act as a disincentive to work. To this end, the 2014 National Employment Policy introduced a tapering scheme which provides adequate support for citizens while at the same time motivates them to participate in the labour market.

## SECTORAL NEEDS

Reaching higher educational targets remains central to the overarching objective of building a strong skill base for Malta's economic needs, which transcends sectors, particularly as Malta continues to position itself effectively as a truly competitive player in the global economy. Naturally, specific sectors would require certain skills and this section will present a high-level sectoral needs analysis underpinned by the digital and green transition.

The National Productivity Report 2021<sup>50</sup>, which was published earlier this year, presents a detailed sectoral analysis including the relevant results of the Digital Readiness Index which was designed to understand the digital challenges and opportunities facing each sector, as well as the gaps that need filling within each sector to step up to digital transformation.. On average, the most relevant technology, across all sectors, was cloud computing (60.9%), followed up by AI and Internet of Things which were respectively identified by 59.1% and 56.6% of all respondents as the most relevant technologies for their businesses. Robotics and augmented and virtual reality technologies were deemed to be least relevant, on average. Further analysis however shows that these technologies are relevant to key economic sectors, such as robotics to the manufacturing sector (50.0% relevancy), block chain to professional services sector (57.9%) and big data to financial services and ICT. For this reason, digital skill strategies should not overlook the requirements of specific industries and should be designed to cater for the broad array of technologies.

Meanwhile, 62.6% of businesses identified available human resources, or lack thereof, as a critical barrier they are facing in their efforts to transform digitally. Similarly, 54.8% claim to be suffering from a shortage of technical skills that are required to carry out the digital transition.

With reference to the green transition, most of the green jobs created locally have so far been related to waste management, the production of renewable energy and energy-efficiency measures. This is very much in line with environmental employment trends in other advanced economies. Green employment is however expected to ramp up considerably given Malta's commitments under the EU's Green Deal as well as, more recently, the Recovery and Resilience Plan, which allocates more than half of Malta's grants allocation to green initiatives.

This effort will act as a key driver in terms of restructuring the local labour market in line with future demand. This also entails major diversification and innovation opportunities for the private sector, either in terms of reinventing current operations and services, or establishing new green ventures, potentially creating more green jobs in the process.

Sectors that could benefit heavily from this transition are those involved in renewable energy, transport, construction, and real estate. Several opportunities also remain untapped in the waste management and recycling sector, including developing innovative ways of reducing and reusing waste. The allocation and skills profiles of jobs in manufacturing could also change considerably as industry greens its processes and operations.

---

<sup>50</sup> Fabri et al., 2020.

Beyond energy priorities, the intensifying impacts of climate change are also fast taking hold, leading to the creation of new roles focused on mitigating and managing these impacts in various sectors, such as agriculture, construction, tourism, and environmental management. These roles require specific professional and scientific skill sets that will be increasingly in demand.

A study carried out by Jobsplus in March 2022 asked companies operating in different sectors to identify the impacts that they would expect to their businesses as a result of the green transition. The creation of new types of jobs garnered the highest response by businesses participating in this survey. This has been followed closely by the adaptation of existing skills. Fundamentally, the bulk of jobs – whether classed as ‘new green job’, existing occupations which require greening skills, or those requiring ‘retraining’ – already possess a base of relevant skills and simply require an adaptation of their competences.

A Cedefop report on green skills for green jobs in Europe explains how the retraining required for workers to convert to an occupation in an entirely different greener industry may be less than expected. Case studies suggest that skills development responses, required to enable a person to fulfil a new occupation, are often a matter of upskilling or adaptation to existing core skills. For example, workers with experience in shipbuilding and in the oil and gas sector are highly sought after in the wind-turbine industry for their skills in welding, surface treatment and outfitting.

Table 4. Examples to upskilling to new occupations

Occupation	Core training	Upskilling	New occupation
<b>Industry electrician/ energy technologist</b>	VET qualifications / tertiary engineering qualifications	Knowledge of energy sources, ability to integrate energy systems, project management	Manager in renewable energy
<b>Industrial operator / industry electrician</b>	VET qualifications / upper secondary qualifications	Assembly, installation of parts, use of tools	Wind-turbine operator
<b>Construction worker</b>	No professional standard	Knowledge of energy systems, data analysis, project management	Energy auditor
<b>Product design and services</b>	VET qualifications / tertiary qualifications	Integrating environmental criteria in design process	Integrated assessment and life cycle analysis
<b>Plumber/ electric and heating installer</b>	Vocational training	Technical training, knowledge of administrative procedures, entrepreneurial skills	Solar-energy entrepreneur / installations project designer
<b>Commodity trader / Broker</b>	Tertiary qualifications	Practical skills on functioning of carbon market, understanding of trading tools	Carbon trader / broker

Source: Cedefop data.

Skills development responses therefore ought to be prioritised in favour of building on existing skills sets, as well as improving the generic skills of people across the entire workforce. These generic skills refer both to skills required in almost any occupation – such as leadership, motivation, communication, critical



thinking and commercial understanding – and to generic green skills that should apply to any occupation. These largely relate to understanding how to prepare the workplace for new environmental legislation and improving energy and resource efficiency. Core skills – including STEM skills – need to be improved at secondary and tertiary levels, as they provide the basis for high-level low-carbon skills, and engineering needs to be made more attractive by both governments and industry, to retrain. More emphasis needs to be placed on application, as opposed to theory. Furthermore, vocational education and training (VET) providers should improve links with companies developing demonstration technologies to attract further students to the industry.

Youths have a big role to play in the green economy, not least because they will be leading the transition in the coming years. Initiatives for the targeted support and promotion of STEM in compulsory-level education therefore remain critical. Early promotion of STEM careers is also necessary, as are incentives for the take-up of STEM subjects at university. Unsurprisingly, the survey carried out by Jobsplus to examine the state of play of green jobs in Malta found that lack of experience is the main barrier for youths to have employment in the green economy. This reality is typical for any sector, let alone the green economy which is in its nascent years and still developing. Skill gaps and lack of technical skills among youths, however, has also been ranked high as a barrier for youth green employment, validating calls to invest more in compulsory level education and up-skilling programmes. On the positive side, the lack of digital skills is considered to be the lowest barrier for youths in embracing the green transition.

## CHALLENGES AND BARRIERS FOR NEETS

Malta has long been at the forefront of the digital transformation, successfully turning digital opportunities into a thriving sector as part of the country's wider strategy to transform the economy into a diversified base of services sector. The sector has picked up significantly since Malta joined the EU in 2004, also because of other emerging sectors, such as remote gaming and fintech. Between 2010 and 2019, this sector grew by more than EUR 740 million in nominal terms, which translates into an annual average growth rate of 14.1%. By the end of 2020, the sector accounted for 9.7% of the total economy. On the strength of elevated performance, the sector has generated high value employment with the annual growth rate standing at 8.5% and with higher-than-average salaries. Malta's digital readiness places it among the frontrunners within the EU – Malta performed above the EU average across all five dimensions of the Commission's Digital Economy and Society Index (DESI) in 2020 and ranked 5th out of the 27 EU Member States.

The transition towards the green economy, on the other hand, has been slower and predominantly driven by government policies to propel private renewable energy investments. This said, the Green Jobs Survey conducted by the National Statistics Office (2020) estimates that there are as many as 7,235 workers currently engaged in green jobs, namely within the renewable energy, energy efficiency and waste management related sectors. Furthermore, many examples of good practice demonstrate that public policy, together with private initiatives, can foster the expansion of the green transformation and harness energy efficiency and renewable energy potential, all of which requires transformation of the skills base. To this end, the National Employment Policy 2021-2030 acknowledges that for EU targets to be met, the local commitment to green jobs is going to increase in order for a green economy to flourish locally.

Several gaps however remain, and despite Malta's strong and resilient economy, and a buoyant labour market, productivity performance un masks several structural challenges that serve as barriers to the digital and green transformation and to supporting employment opportunities.



The National Productivity Report 2021, which focuses on the role of digital transformation as a tool that can foster productivity gains leading to improved economic outcomes and to a higher quality of life, highlights very specific gaps in Malta's digital ecosystem as well as in the readiness of companies across sectors to truly internalise digital transformation. The study allowed a granular analysis of the main challenges Maltese firms face in embracing digital transformation across several dimensions. When assessing the capacity and capability of firms to embrace digital transformation, the report showed that there is an increased need to have better allocation of resources and budgets to support digital channels, activities, service delivery and staff training. Insufficient human resources and a lack of technical skills in current staff as well as inadequate resources allocated towards staff training to improve digital readiness have been flagged across most economic sectors as key barriers to digital transformation which are resulting in limited capacity to anticipate and respond to new technologies and digital innovation.

Malta also continues to face particular and structural challenges in the field of formal educational attainment, which is as a result impinging on the country's potential to exploit the opportunities offered by green growth and digitalisation. In fact, a point of concern highlighted by the European Centre for the Development of Vocational Training (Cedefop) country report for Malta (2020) is the persistently high share of the Maltese workforce with a low level of educational attainment (ISCED Level 0-2) – a finding also confirmed by Eurostat data. Accordingly, in comparison to other EU countries, Malta has the second highest share of workers aged between 15-64 (33.8%) who at best have an educational level of ISCED 2. It also emerges that among those with an educational level 3-4, Malta has the fourth lowest share of workers among Member States. With regards to tertiary educated workers, Malta ranks at 17th place.

As expected, age factors heavily in this situation. According to Cedefop, in Malta, low skills are particularly found among people out of the labour force. Inactive adults aged 35-54 and 55-64 report on average the highest share of low skills in all domains considered: education and digital skills (i.e., low use of internet or below basic digital skills). Employed adults of all age groups show a lower risk of being low skilled than the average in the country, apart from those aged 55-64 which present a higher-than-average risk of having low education and low digital skills. Employed adults aged 25-34 and 35-54 show a higher risk of low education than the average at the EU-27 level.

There have been signs of improvement over the years; however, Malta's educational success continues to be plagued by a high degree of early school leavers, where Malta ranks in third place from the last with respect to the expected number of school years, and a low uptake of post-compulsory education in Malta, which in 2018 stood at just 8.1% of the total post-compulsory school age population, as opposed to the EU-27 average of 12.1%. Malta also keeps falling short of targets to increase take-up of STEM subjects, and in 2019 ranked third from the last with respect to the number of tertiary education graduates (per 1,000 of population aged 20-29) in STEM subjects when compared to all other EU-27 Member States.

Against this backdrop, a Jobsplus' National Skills Survey (2017) highlighted a lack of sufficient digital skills, both in quality and quantity, which continues to affect the labour market, particularly since employers are seeking either more targeted or highly specialised skills than those readily available, even among The Malta College of Arts, Science & Technology and University of Malta ICT graduates. These include, for example, specific programming languages, increasingly, more well-rounded "hybrid" skills which cater for analytical, mathematical, or statistical skills in addition to the standard ICT specialisation. The high demand for quality digital and related hybrid skills, not only locally but globally, leads to a high rate of job mobility which can impact local companies' strategic planning. Similarly, the declining take-up of STEM subjects across a number of industrialised economies is well cited in several ILO (International Labour Organisation) reports to be a major hurdle of the green transition, particularly with regards to engineering and numerate scientists, where new and existing skills fall short of the replacement levels needed to deliver

on environmental projects. Equally, these skill shortages are restricting the talent pool, and likewise the prospects for the development of more innovative, cleaner and cheaper green solutions.

In the coming years, Malta will also continue to face the structural problem of an ageing population. Naturally, demographic developments hold significant implications for the future labour market, particularly when it comes to the availability of skills. As is the case with other developed economies, Malta has been experiencing lower fertility rates and a growing trend towards older women having children. Malta's fertility rate, which measures the number of live births per 1,000 women of reproductive age (ages 15 to 49 years) per year, had improved slightly from 1.4 in 2010 to 1.5 in 2011, then stabilised at around 1.4 in the years that followed, until it fell from 1.4 in 2016 to its lowest recorded level of 1.1 in 2019. Correspondingly, the average age of women giving birth increased from 28.9 to 30.6 during this time. Against this backdrop, Malta is also experiencing an ageing population, reflected by an increasing old-age dependency ratio. The old age dependency ratio, which measures the number of old dependents (i.e., those aged 65 and over) per 100 people in the workforce (i.e., 15-64 years old), has in fact increased from 21.4 in 2010 to 28.1 in 2017. It is important to point out that since 2014, the ratio's rate of growth has moderated, and the trend has also been reversed between 2017 and 2020, where it now hovers around 27.1. This is due to the significant increase in female participation and the very strong inward migration flows of young workers in recent years, which has boosted the size of the current labour force and helped ease the dependency pressures on the local labour force. A drive to incentivise more people in retirement to continue working, while ensuring that skills are transferred to prepare future workers has also been made one of the key priorities of the National Employment Policy 2021-2030.

## GOOD PRACTICES CONNECTED WITH PROGRAMMES FOR NEETS

This national strategy set out a comprehensive policy framework for Malta's digital transformation, encompassing the required changes at both a social and economic level. It is built around a vision of Malta as a "digitally-enabled country empowering its people, communities and entrepreneurs through the intelligent and universal use of ICT." This strategy was the first major policy document to put forward a firm concept of a digital economy across all major industries, dealing with the potential of digitalisation and automation to transform established sectors while also promoting the potential for the creation of new, tech-enabled economic niches and sectors. The value of digitalisation in securing more sustainable economic development is also referenced, signalling an early recognition of the mutual reinforcement that could be gained by linking national green and digital agendas before this approach became common currency.

The Digital Malta strategy identified human capital as a critical strategic enabler for achieving its vision. It therefore called for the strengthening of Malta's workforce through a focus on digital competence and specialist technology skills

The Digital Malta Strategy served as an umbrella policy framework for other landmark strategies which tackled specific aspects of digital transformation. Among these were the following policies which centred on the skills and employment facets of this process:

- The National Employment Policy issued in 2014 identified digital skills as an emerging concern that could potentially limit Malta's capacity to position itself effectively as a truly competitive player in the global economy. The authors of the policy document were clearly also very aware that key

sectors in Malta at the time, not least the digital gaming sector and the growing financial services sector were, to a large degree, increasingly frustrated at the growing tech skills gaps. Action had been taken in the preceding months to set up an eSkills Malta Foundation tasked with bringing together all stakeholders in a bid to upgrade industry-ready digital skills in Malta.

- In 2018, based on the findings of a survey carried out by PriceWaterhouse Coopers Malta, the The eSkills Malta Foundation issued a National eSkills Strategy looking ahead to 2021. A fundamental recommendation was an overhaul of the education system to embed digital skills in every aspect of learning, with appropriate systems in place to ensure that this content is continually updated in line with ongoing developments. This, in the view of the strategy document, would ensure a more robust skills pipeline in the future particularly when complemented by effective curriculum design at the tertiary level together with financial incentives to boost take-up. In terms of the existing workforce, the document called for investment in intense, focused short training programmes to upgrade digital skills and reinforce specialisation where appropriate.

The most recent major policy development in this space was the launch of the 2021 National Employment Policy. This comprehensive strategy, which looks ahead to 2030, identifies digitalisation and automation as key economic drivers and stresses the importance of ensuring the adaptability of the workforce through appropriate policies and measures. The 2021 Policy therefore recommends a National Skills Census to establish a baseline for future measures and to identify the actual and potential skills gaps that could threaten a successful digital transition. The findings of this census would then inform the workings of a National Skills Policy Council, which would provide evidence-based assessments of Malta's future skill requirements as a basis for national planning and strategic decision-making.

There are also programmes targeted at NEETs. Launched in 2014, the Youth Guarantee is Malta's flagship scheme targeting NEETs and is administered by Jobsplus utilising ESF funds. It caters for young people aged 16 to 25 years and consists of four education and employment related initiatives: the NEET Activation Scheme II, SEC Preventive Classes, MCAST Preventive Classes, and ICT Courses. This project is part-financed by the European Social Fund, at a co-financing rate of 80% EU and 20% National Funds, according to the Operational Programme II – European Structural and Investment Funds 2014-2020 – “Investing in human capital to create more opportunities and promote the well-being of society”. Based on preventive and assistive measures, each opportunity is designed to help young people either continue their education or increase their chances of finding skilled employment with positive prospects. This principle, that of preparing youths for “quality employment” as opposed to settling for low or unskilled work with little potential for advancement, is the defining feature of the scheme.

Services are highly personalised and start with individual profiling sessions. In particular, the NEET Activation Scheme II supports young people who are not in education, employment or training (NEETs) with personal training and mentoring. The aim here is not only to facilitate their transition from education to employment, but also to actively improve their employment prospects. This goal impacts their quality of life and social integration.

Investments in the green economy are going to be the key driver of the post-pandemic recovery and are set to radically change our economy and society. In order to ensure that such a transformation is inclusive and sustainable, policymakers shall be able to deploy new solutions to increase participation at all levels, particularly of the most vulnerable. In 2021, Jobsplus was awarded funding through the EEA & Norway grants to implement the INTERCEPT project. INTERCEPT delivers an innovative scheme in three countries (Malta, Lithuania, Italy) equipping 300 inactive NEETs aged between 25 and 29 to seize training

and employment opportunities linked to the green economy. Under the project, an innovative activation programme will be developed featuring an outreach strategy, career counselling, tailored activation, training, and workplace exposure in the segment of green jobs. The programme will be designed building on the research about the specifics of the target group and meta-analysis of previously implemented active labour market policy (ALMP) practices. At the end of the intervention, participants are expected to access the labour market. Four of the project partners are public employment services (MT, LT, IT and LU). The project will allow them to explore the potential extension of their services, build new connections to employers in the dynamic segment of the green economy and enhance their competencies through international experience sharing and piloting. INTERCEPT will also engage employers to ensure consistency between labour force competences and demand in the green economy. Employees of PES will be trained and, thus, better prepared to address the labour needs related to the green economy. The project aims to mainstream the new approach into a structural measure to integrate NEETs in the green economy, relying also on the evaluation of piloted schemes.

Another example can be Free Childcare Scheme. This nationally funded scheme was launched in April 2014 to provide free childcare to children aged from three months to three years of age whose parents are either employed or in any form of education leading to a recognised qualification. Low female participation in the workforce was identified as a core challenge for Malta's economy in the 2014 National Employment Policy. Although female participation rates had been increasing gradually in previous years due to mainly tax-based incentives, the number of inactive females was consistently higher than the EU average. Apart from imposing a restriction on the labour market growth that was sorely needed by the growing economy, this situation also increased the risk of social exclusion and poverty. The Free Childcare Scheme was therefore devised as a means of eliminating the cost of childcare as a barrier to employment, particularly among young mothers. The Scheme also catered for individuals in education, reducing drop-out rates and improving employment potential once studies were completed.

Lowering youth unemployment and aiming to effectively engage as many young people as possible in training or work, remains at the heart of the EU policy agenda. However, the recent economic crisis that was caused by the COVID-19 pandemic exacerbated the situation of NEETs in Europe, not least Malta, which has started to see a surge in the rate of youth NEETs following a period of registered improvements. NEETs are without a doubt hit the hardest and are prone to fall victim to mental health issues and levels of loneliness. Upgrading education and skill training programmes remains a central policy tool to addressing the employment gap facing the young, especially vulnerable and marginalised young people with lower levels of education.

The National Employment Policy launched by the Maltese government in November 2021 provides a comprehensive framework for national educational and labour market strategies that are being considered. This comprehensive Policy takes a holistic approach to Malta's emerging employment challenges, with a constant eye on EU and international trends that will inevitably continue to disrupt the local economy. On this basis, NEETs are not considered in isolation and solutions are identified with a firm understanding of other structural changes in local, regional and global labour market dynamics. Solutions must be designed with an eye to the longer term, and with due focus on securing decent prospects for youths in this category, that will hopefully equip them with the right skills and potential to navigate the fast-changing employment environment with confidence. This environment is becoming ever more complex and demanding both on a local and global level. The post-pandemic environment coupled with deep technological changes and other drivers of change will demand a workforce that is prepared and equipped to deal with the new economic landscape. The end target must not simply be a "tick the box" approach that aims to settle youths

into any form of education, training or employment, but one that sets out to provide them with quality, future-proof employment.

## 8. PROSPECTS FOR NEETS & POLICY RECOMMENDATIONS

Based on the case studies, the following policy recommendations can be made for NEETs:

1. More action is needed to support young people outside the labour market, including NEETs. This is particularly true for those at risk of poverty, social exclusion, disability and discrimination, including those from ethnic minority or migrant backgrounds, asylum seekers and refugees.
2. Lack of a developed public childcare system leads to young women leaving the labour market and not undertaking additional training. The defamilisation of care may lead to creating opportunities for those belonging to NEETs to become active and take steps to enter the labour market. There is a need for policy interventions aimed directly at women, introducing measures to relieve them from the main responsibilities of caring for children or dependent adults in the family and to enable them to achieve a better work-life balance.
3. One way to address the gender employment gap and to activate more women to participate in the labour market is to promote entrepreneurship development among women, for example by developing incentives and strengthening current initiatives for women entrepreneurs.
4. Policymakers and stakeholders should place more emphasis on green and digital transformation and its impact on the NEET population. Policymakers should envision more specific interventions to ensure that the Twin Transitions are inclusive.
5. There needs to be a greater role for the private sector in both identifying skills needs and designing training and support measures for NEETs. Ensuring flexibility in skills provision is key to meeting the needs of business and to addressing the question of how the wider education system meets the needs of the future economy.
6. There are currently few studies focusing specifically on NEETs. An extensive analysis of the impact of the green/digital transformation on NEETs is needed to identify key skills and specific skills to be strengthened. Based on this analysis, ensure that the content of initiatives designed for the target group (GOL, dual system, etc.) is in line with the needs and effectively leads to empowerment of the disadvantaged group.
7. In order to reduce the number of NEETs, it is necessary to strengthen the synergy between different interventions and measures. This will ensure that the youth are engaged in a pathway that effectively accompanies them to employment. In an ever-changing world, career guidance for youth and career counselling for employees should be provided. This will help them to make better decisions about their career choices.
8. In order to increase the motivation to undertake additional activities, it is possible to introduce a gradual reduction of social benefits so that activation processes are convenient for the participants. Apprenticeships and traineeships are a valuable learning channel. These programmes will continue to be enhanced to increase the number of people taking advantage of them, especially in areas where skills needs have been identified or in response to opportunities in sectors or sub-sectors. This will ensure that young workers are prepared for future demands and that local businesses have continued access to talented workers. Outreach campaigns to both potential apprentices/trainees and employers, as well as a new online apprenticeship marketplace, will help support ambitions in this area.



9. As the nature of work and society changes, the way work is organised must also change. National authority in each country should develop guidance to make it easier for employers to offer more family-friendly work options, promoting the adoption of flexible and/or remote working arrangements and structures for parents. It is also necessary to launch a national consultation on extending flexible working options to all employees.
10. The jobs listed under digital and green sector development, and those that can be done through digital skills and green skills development, tend to be highly technical and physically demanding (e.g., assembling green energy equipment). If we want to activate women, activities should be different than for men, due to the sector and technical specificity.
11. There is a need for a long-term, sustainable development path, and short-term solutions are insufficient. To be effective, young people need quality, stable and sustainable employment. This includes equipping them with the necessary skills to successfully integrate into the labour market.
12. A solution may be creating mobile information points, e.g., minibuses through which career counsellors and job mediators reach people living in rural areas and small towns. This gives them access to job placement services, vocational guidance and career planning training, among others.

## 9. REFERENCES

1. Audit Commission for Local Authorities and the National Health Service in England, *Against the odds. Re-engaging young people in education, employment or training*, 2010, <https://www.bl.uk/collection-items/against-the-odds-reengaging-young-people-in-education-employment-or-training-local-government>
2. Council of the European Union, *Council Recommendation of 22 April 2013 on Establishing a Youth Guarantee*, Official Journal of the European Union, 2013, [https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32013H0426\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32013H0426(01)&from=EN)
3. Cueto, Begona, *Low education level, low labour force participation. A hard-to-break vicious circle*, The Social Observatory, 2017, <https://elobservatoriosocial.fundacionlacaixa.org/en/-/bajo-nivel-educativo-baja-participacion-laboral>.
4. Directorate-General for Justice, *Barcelona Objectives: The Development of Childcare Facilities for Young Children in Europe with a View to Sustainable and Inclusive Growth*, Publications Office, 2013, <https://data.europa.eu/doi/10.2838/43161>
5. European Commission, *Youth on the Move*, 2010, <https://ec.europa.eu/growth/tools-databases/vto/policy/youth-move>.
6. European Commission, *Youth Opportunities Initiative*, 2011, <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2011:0933:FIN:EN:PDF>.
7. European Commission, *Toward a job-rich recovery*, 2012, <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A52012DC0173>.
8. European Commission, *Working Together for Europe's Young People. A Call to Action on Youth Unemployment*, 2013, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52013DC0447>.
9. European Commission, *Degree of urbanisation*, no date, <https://ec.europa.eu/eurostat/web/degree-of-urbanisation/background>.
10. European Commission, *Communication from the Commission. The European Green Deal*, 2019a, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2019%3A640%3AFIN>.
11. European Commission, *Education and Training Monitor — Cyprus*, 2019b, [https://www.acs.si/wp-content/uploads/2020/11/Education\\_and\\_training\\_monitor\\_2020-country\\_analysis.pdf](https://www.acs.si/wp-content/uploads/2020/11/Education_and_training_monitor_2020-country_analysis.pdf)

12. European Commission, *Education and Training Monitor — Volume II. Cyprus*, 2020a, [https://www.acs.si/wp-content/uploads/2020/11/Education\\_and\\_training\\_monitor\\_2020-country\\_analysis.pdf](https://www.acs.si/wp-content/uploads/2020/11/Education_and_training_monitor_2020-country_analysis.pdf)
13. European Commission, *Teaching and learning in a digital age*, Education and Training Monitor 2020, 2020b, <https://op.europa.eu/webpub/eac/education-and-training-monitor-2020/en/chapters/chapter1.html>.
14. European Commission, *The European Pillar of Social Rights Action Plan*, 2021, <https://op.europa.eu/webpub/empl/european-pillar-of-social-rights/en/>.
15. European Commission, *Population aged 15-34 by sex and age (1 000)*, 2022a, [https://ec.europa.eu/eurostat/databrowser/view/EDAT\\_LFSE\\_17/default/table?lang=en&category=educ.educ\\_outc.edatt.edatt0](https://ec.europa.eu/eurostat/databrowser/view/EDAT_LFSE_17/default/table?lang=en&category=educ.educ_outc.edatt.edatt0).
16. European Commission, *Statistics on young people neither in employment nor in education or training*, 2022b, [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Statistics\\_on\\_young\\_people\\_neither\\_in\\_employment\\_nor\\_in\\_education\\_or\\_training#NEETs:\\_analysis\\_by\\_sex\\_and\\_age](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Statistics_on_young_people_neither_in_employment_nor_in_education_or_training#NEETs:_analysis_by_sex_and_age).
17. European Foundation for the Improvement of Living and Working Conditions (Eurofund), *Living and working in Europe 2016*, Publications Office of the European Union, 2017, [https://www.eurofound.europa.eu/sites/default/files/ef\\_publication/field\\_ef\\_document/ef1708en.pdf%20](https://www.eurofound.europa.eu/sites/default/files/ef_publication/field_ef_document/ef1708en.pdf%20).
18. EY, *Perspectives on a European green recovery from the Covid-19 pandemic*, 2021, [https://assets.ey.com/content/dam/ey-sites/ey-com/en\\_gl/topics/assurance/assurance-pdfs/ey-green-recovery-report.pdf](https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/assurance/assurance-pdfs/ey-green-recovery-report.pdf).
19. Fabri, Jean-Pierre, Fenech, Gleen , Ellul, Joshua and Marmara, Vincent, *Digital transformation as a route to national productivity and competitiveness*, National Productivity Report 2021, 2020, <https://nationalproductivityboard.gov.mt/wp-content/uploads/2022/01/National-Productivity-Report-2021.pdf>
20. FranceAgriMer, *L'impact de la crise de la COVID-19 sur la consommation alimentaire en France: parenthèse, accélérateur ou élément de rupture de tendances ?*, 2020, [https://www.franceagrimer.fr/fam/content/download/65172/document/15\\_CONSO%20COVID%20Impact%20tendances\\_vf.pdf?version=4](https://www.franceagrimer.fr/fam/content/download/65172/document/15_CONSO%20COVID%20Impact%20tendances_vf.pdf?version=4).
21. France Université Numérique, "Discovering the professions related to the ecological transition, which create many jobs", 2022, <https://www.fun-mooc.fr/fr/cours/la-decouverte-des-metiers-de-la-transition-ecologique-creatrice/>
22. Fondation Nicolas Hulot pour la Nature et l'Homme, *Réorienter et relocaliser notre agriculture et alimentation vers un modèle résilient et durable*, 2020, [https://www.fnh.org/wp-content/uploads/2020/10/relocaliser\\_agriculture-post-covid-fnh.pdf](https://www.fnh.org/wp-content/uploads/2020/10/relocaliser_agriculture-post-covid-fnh.pdf).
23. Fundacja Rozwoju Demokracji Lokalnej, *Education attainment level and NEETs*, 2020a, <http://www.youth-impact.eu/2020/05/01/education-attainment-level-and-neets/>.
24. Fundacja Rozwoju Demokracji Lokalnej, *International Standard Classification of Education*, 2020b, <https://www.youth-impact.eu/2020/03/13/international-standard-classification-of-education/>
25. Gregg, Paul and Tominey, Emma, *The Wage Scar from Youth Unemployment*, The Centre for Market and Public Organisation, No. 04/097, 2004, <http://www.bristol.ac.uk/media-library/sites/cmpo/migrated/documents/wp97.pdf>.
26. Human Resource Development Authority of Cyprus (HRDA), *Εντοπισμός Αναγκών σε Πράσινες Δεξιότητες στην Κυπριακή Οικονομία 2017-2027*, 2018, [https://www.hrdaauth.org.cy/wps/wcm/connect/hrda/f07f831e-7d5c-4bf6-81bd-7074dd520541/C452%7E1.PDF?MOD=AJPERES&CONVERT\\_TO=url&CACHEID=ROOTWOR](https://www.hrdaauth.org.cy/wps/wcm/connect/hrda/f07f831e-7d5c-4bf6-81bd-7074dd520541/C452%7E1.PDF?MOD=AJPERES&CONVERT_TO=url&CACHEID=ROOTWOR)



27. International Labour Office (ILO), *What does NEETs mean and why is the concept so easily misinterpreted?*, Technical Brief No. 1, 2015, [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms\\_343153.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms_343153.pdf).
28. International Renewable Energy Agency (IRENA), *Renewable Energy Roadmap For The Republic Of Cyprus. Summary For Policy Makers*, 2015, <https://www.irena.org/publications/2015/Jan/Renewable-Energy-Roadmap-for-the-Republic-of-Cyprus>
29. Jolly Cécile and Douillard Pierre, *L'économie circulaire, combien d'emplois ?*, La Note d'Analyse, n. 46, 2016, [https://www.strategie.gouv.fr/sites/strategie.gouv.fr/files/atoms/files/na46\\_economie\\_circulaire\\_07042016\\_finale-web.pdf](https://www.strategie.gouv.fr/sites/strategie.gouv.fr/files/atoms/files/na46_economie_circulaire_07042016_finale-web.pdf)
30. Kiss Monika, *Digital skills in the EU labour market*, Directorate-General for Parliamentary Research Services, 2017, <https://op.europa.eu/en/publication-detail/-/publication/cb9ff359-e2c9-11e6-ad7c-01aa75ed71a1/language-en>.
31. Lisjak Josip, Rončević Ante , and Markovinović Danko, *Key Tasks and Competences of Spatial Data Manager in Local Self-Government*, *Tehnički glasnik* 15, no. 2, 2021, <https://hrcak.srce.hr/file/375790>.
32. Madej-Kurzawa, Iwona, Pieczarka, Katarzyna and Węgrzyn Grażyna, *Professional and educational activity of youth in the digital economy*, *Problems and Perspectives in Management*, 19(3), 175-184, 2010.
33. Mazowieckie Obserwatorium Rynku Pracy, *Diagnoza sytuacji młodych osób należących do grupy NEETs*, no date, [https://obserwatorium.mazowsze.pl/aktualnosci/mazowsze/diagnoza-sytuacji-mlodych-osob-nalezacych-do-grupy-neet](https://obserwatorium.mazowsze.pl/aktualnosci/mazowsze/diagnoza-sytuacji-mlodych-osob-nalezacych-do-grupy-neet?p=aktualnosci/mazowsze/diagnoza-sytuacji-mlodych-osob-nalezacych-do-grupy-neet)
34. Medieu Aurore and al, *Résultat des groupes de travail Compétences-formation de l'économie circulaire*, MTES/CGDD/SEEIDD/REAE, 2010.
35. Ministère de la Transition écologique, *Métiers verts et verdissants : près de 4 millions de professionnels en 2018*, 2021, <https://www.statistiques.developpement-durable.gouv.fr/metiers-verts-et-verdissants-pres-de-4-millions-de-professionnels-en-2018>.
36. Ministère de la Transition écologique, *Observatoire national des emplois et métiers de l'économie verte – Bilan d'activité 2021 – Orientation 2022*, 2022, <https://www.statistiques.developpement-durable.gouv.fr/observatoire-national-des-emplois-et-metiers-de-leconomie-verte-bilan-dactivite-2021-orientations>.
37. Najwyższa Izba Kontroli, *Działania organów administracji publicznej na rzecz podnoszenia kompetencji cyfrowych społeczeństwa*, 2022, <https://www.nik.gov.pl/plik/id,25577,vp,28343.pdf>
38. Organisation for Economic Cooperation and Development (OECD), *OECD Economic Surveys: Italy. Overview*, 2019, <https://www.oecd.org/economy/surveys/Italy-2019-OECD-economic-survey-overview.pdf>
39. Organisation for Economic Cooperation and Development (OECD), "Texts adopted. European skills Agenda for sustainable competitiveness, social fairness and resilience", 2021a, [https://www.europarl.europa.eu/doceo/document/TA-9-2021-0051\\_EN.html](https://www.europarl.europa.eu/doceo/document/TA-9-2021-0051_EN.html).
40. Organisation for Economic Cooperation and Development (OECD), *OECD Green Growth Studies. Greener Skills and jobs. Highlights*, 2021b, [https://www.oecd.org/cfe/leed/Greener%20skills\\_Highlights%20WEB.pdf](https://www.oecd.org/cfe/leed/Greener%20skills_Highlights%20WEB.pdf).
41. Public Health England, *Local action on health inequalities: Reducing the number of young people not in employment, education or training (NEET)*, Health Equity Evidence Review, no. 3, 2014,

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/356062/Review3\\_NEEts\\_health\\_inequalities.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/356062/Review3_NEEts_health_inequalities.pdf)

42. Saczyńska-Sokół, Sylwia and Łojko, Maja, *Situation of NEEts on the labor market*, House of the University of Natural Sciences and Humanities in Siedle, no. 108, 2016, <https://core.ac.uk/download/pdf/160237166.pdf>
43. Service of the Republic of Poland, *AI Tech*, 2022, <https://www.gov.pl/web/aitech>
44. Service of the Republic of Poland, *Digital Leaders*, 2022, <https://www.gov.pl/web/govtech/liderzy-cyfryzacji>
45. Smoter Matthew, *They don't learn and they don't work. Are they a challenge to public policy*, December 16, 2019, <https://ibs.org.pl/publications/nie-ucza-sie-i-nie-pracuja-czy-stanowia-wyzwanie-dla-polityki-publicznej/>
46. The Prince's Trust, *YouGov Youth Index 2010*, 2010, <https://www.yumpu.com/en/document/read/42947345/the-princes-trust-yougov-youth-index-2010>.
47. Uniwersytet Adama Mickiewicza w Poznaniu, *Młodzi na rynku pracy – stan po pandemii w zarysie*, 2021, <https://biurokarier.amu.edu.pl/blog/blog-wpisy/mlodzi-na-ryнку-pracy-śtan-po-pandemii-w-zarysie>
48. Vlada Republike Hrvatske, *Nacionalna razvojna strategija Republike Hrvatske do 2030. godine*, 2021, <https://hrvatska2030.hr/wp-content/uploads/2021/02/Nacionalna-razvojna-strategija-RH-do-2030.-godine.pdf>
49. Vlada Republike Hrvatske, *Program razvoja sustava strukovnog obrazovanja i osposobljavanja 2016-2020*, 2016, [https://www.asoo.hr/UserDocsImages/Program%20SOO\\_HR.pdf](https://www.asoo.hr/UserDocsImages/Program%20SOO_HR.pdf)
50. Vlada Republike Hrvatske, *Strategija cjelozivotnog profesionalnog usmjeravanja i razvoja karijere u republici hrvatskoj 2016.-2020*, 2014, <http://www.kvalifikacije.hr/sites/default/files/documents-publications/2017-05/Strategija%20CPU%20i%20razvoja%20karijere%20u%20RH%202016.-2020..pdf>.

Implemented by:



Fondazione  
Polo Universitario  
Grossetano



CASE – Centrum Analiz Społeczno-Ekonomicznych  
CASE – Center for Social and Economic Research



HRVATSKI ZAVOD  
ZA ZAPOSŁJAVANJE