

Working Group 4: Sustainability-Related Jobs and New Skills

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General framework

The current scenario: short-term shocks and long-term trends

As Ursula Von Der Leyen effectively stated in presenting the major proposal of her mandate, there cannot be a green deal without a just transition. The concept of “just transition” has always been at the heart of great industrial revolutions in the past and constitutes the driving force behind the birth of modern welfare systems. Without guaranteeing the conditions for social stability – through rights, sustainable working conditions and social protection – it is impossible to maintain the economic and political stability of a state.³⁹

In order to accelerate the pace of this transition, labour markets, professionals and educational systems need to be oriented towards jobs and skills of the future. This need is not justified “only” by the incumbent shift of economic models and business operations towards greener outlooks. As a matter of fact, today entire industries have been blown out by the pandemic COVID-19 and are kept in artificial life by

³⁹ IAI, L. Bergamaschi, There is no Green Deal without a Just Transition, December 2019.

public subventions. The experience of the lock-down and social distancing brought to surface intrinsic vulnerabilities and obsolescence of some of the models our economies and societies currently rely on. Some types of business such as those in the Tourism or Retail sectors that depend on in-person contact or travel, have sustained greater damage and need to reshape themselves in order to survive. New analysis conducted by the IMF has estimated that 97.3 million individuals, or roughly 15% of OECD countries’ workforce, are classified as being at high risk of being furloughed or made redundant in the current context⁴⁰.

Comprehending these short-term shocks and long-term trends, there is indeed a renewed urgency to implement proactive initiatives to ease the transition of workers into more sustainable and future-oriented job opportunities, in order to accelerate an inclusive green transition. Above all it is now essential to take adequate measures to consolidate resilient citizenship, built upon key features such as economic growth and job creation, together with education, skills match, life-long learning, diversity, equality and inclusion.

Emerging and declining skill sets

Over centuries, technological, social and political transformations have shaped economies and the capacity of individuals to make a living. The first and second Industrial Revolution, for example, gave rise to new machines, new ways of work and new demand for skill sets that could harness the power of new resources and production systems such as steam, coal and factory production. This transformation has consequently given rise to new professions and new ways of working that eventually paved the way to greater prosperity despite initial job displacement among individuals.

⁴⁰ OECD Data: Harmonised unemployment rate (HUR), January-June 2020, 2020a, (link).

In the 21st century, the twin forces of technology and globalisation have brought profound transformations to labour markets in the near term⁴¹. Across countries and supply chains, several studies have evidenced rising demand for employment in nonroutine analytics jobs accompanied by significant automation of routine manual jobs⁴², indicating that millions of jobs were displaced from humans to machines over the last decade⁴³. The past two years have seen an exponential acceleration in the adoption of new technologies, such as cloud computing, Big Data and e-commerce, following an established trend. These new technologies are set to drive future growth across industries, as well as to increase the demand for new job functions and skill sets. At the same time this technological adoption will impact workers' jobs by displacing some tasks from humans to machines and will have a positive or negative disruptive effect depending on a worker's occupation and skill set.

Critical issues and opportunities

Market and societal needs

As the transition to circular business models will be dramatically driven by digitalization, the above-mentioned scenario is equally relevant for the general issue of "future jobs" and also for the specific one of "green jobs". Platform businesses are a clear example of how digital transformation offers new perspectives for developing circular business models, i.e. sharing economy in urban transportation, energy communities, online platforms for second-life products retail.

41 Baldwin, R., *The Globotics Upheaval: Globalisation, Robotics and the Future of Work*, Oxford University Press, 2019.

42 World Economic Forum, *The Future of Jobs Report 2018*, 2018.

43 Ding, L. and J. Saenz Molina, *Forced Automation by COVID-19? Early Trends from Current Population Survey Data*, Federal Reserve Bank of Philadelphia, September 2020.

From the debate carried on by Working Group n°4, afterwards "The Group" companies and market participants today have mainly three needs to respond to, in order to engage in a green and just transition.

The first one derives indeed from the Fourth Industrial Revolution and the potential of climate change mitigation that 4IR Technologies may encompass. The major exemplification of this first point comes from the energy industry, which will not only be impacted upstream by technology (i.e. for what concerns energy production and transport), but could implement disruptive innovations downstream as well (i.e. in distribution and consumption). It is in fact thanks to technology that today we commonly use terms as "*prosumers*"⁴⁴. As described before the potential of technology can empower or threaten human labour, and for this reason the need for technology implementation comes along with the consolidation of relevant complementary skills.

The second identified market-specific need relates to the concept of planetary boundaries⁴⁵. To cope with a world of finite resources, economic models have the imperative to decouple growth from the depletion of resources. This entails a two-folded set of initiatives: on one side companies need to reduce the impact and the carbon footprint of their existing operations; on the other side, companies have the opportunity to embrace new business models including nature-based solutions and regenerative practices (for instance, regenerative agriculture), to achieve a greater resilience and independence from resources scarcity.

The third systemic need consists in providing a fertile environment for partnerships, involving private players, public institutions and community representatives. This third fundamental element is derived from the acknowledgment that dialogue with stakeholders and coop-

44 A consumer who becomes involved with designing, customizing and producing products and services for their own needs.

45 Rockström, J., W. Steffen, K. Noone, Å. Persson, et.al. 2009. Planetary boundaries: exploring the safe operating space for humanity. *Ecology and Society* 14(2): 32.

eration is key for “anything” (a company, an initiative, a movement, an organization) to call itself “sustainable”. Nothing is sustainable “by definition”: only engaged stakeholders are entitled with the right to judge if something is impacting them in a positive or negative way, hence is “sustainable” or “not sustainable”.

Constraints and opportunities

On top of this three-fold market conditions, the Group focused on enlightening what is the societal side of those needs and mutually agreed that the key elements to be addressed are education, capacity building and access to employment.

A great deal of citizens is nowadays aware of its need for sustainability-related education and circular economy literacy. Not surprisingly, the greater scream for action came from schoolkids and people who are most in touch with the educational and schooling systems (i.e. Fridays for Future).

However, the ownership of this transition does not reside in younger generations alone, the whole society is engaged and is going to be somehow impacted by it, especially if considering effects on labour. Indeed, a distinction must be made: one thing is the education a society can provide, embedding its core values and its primary wealth of knowledge; other things are the capabilities and skills that individuals are able to perform in a given professional field. The former refers to formal educational systems while the responsibility for the latter is shared by companies, the “demand” of skills, and informal educational bodies, such as training centres.

Assuming this, the main identified opportunity for individuals, youngsters and elders, is to be equipped with key ABC literacy of which challenges the world is facing today in terms of planetary boundaries and resources scarcity, and how a transition from linear to

circular economic patterns is not only needed, but will most surely be enforced by regulation, in less than twenty years.

In the light of this thoughts, the relevant constraint that the Group agreed on is, as usual, time. Just like growing a brain, consolidating cultural values and assert any intellectual standing usually take decades, in the same way building knowledge and stimulate awareness on this topic, like any other given topic, will take time. It has taken time already.

Proposal

Eco-Living Lab Academy

The Group spent two days brainstorming about these three main issues: the education that formal schooling systems provide to children and to young adults; the skills that citizens consolidate thanks to school and to their personal and professional experiences and then leverage in the job market; and finally the employment opportunities those citizens today have access to, and how will they evolve in the near future.

The reflection about education and employment, and about how those opportunities could habilitate and/or accelerate the transition towards new, circular economic patterns, is not an exclusive matter of concern of younger generations. Indeed, it also fundamentally engages the current adult workforce across different economic sectors, that will be profoundly revolutionized in the next decade. After acknowledging this, the Group stopped thinking of “education, skills and employment” and started reshaping these concepts in RE-education, RE-skilling and RE-employment.

The proposal elaborated by the Group consists in the creation of an academy, the Eco-living Lab Academy (ELLA). This entity is meant to be a multi-stakeholders consortium, articulated in territorial and re-

gional bodies, gathering representatives from five different segments of society: Universities and the Academia, entrepreneurs and industrial players, third-sector entities such as foundations, NGOs and civic associations, high-schools and employment agencies.

The idea behind putting together this variety of actors has a precise goal: fill-in the gaps. Brainstorming around sustainability-related jobs and the creation of new skills, together with the consideration of what companies need today in order to be driven towards transition, and what society urgently ask for in order to live a just transition, means constantly be facing gaps to fill-in. Whether we talk about skills-gaps or mismatches in the workforce or in people looking for their first job. Whether we consider gaps in the demand of employment meeting the supply of employment. Whether we struggle with educational gaps and cultural gaps, when dealing with concepts and dynamics such as “the circular economy” or “the gig economy” or simply the digitalization, which are totally unfamiliar to a large part of the world population. Whether we think about gaps in the integration of schooling systems and the corporate world. And so on and so forth. The Group understood that providing a transgenerational - public and private - multi-stakeholder baseline to the Academy, could at least partially cope with the complex spider net of gaps that need to be filled-in today.

The mission of the Eco-Living Lab Academy is to garrison the trends insisting in a given territory in terms of societal and market needs and circular economy related opportunities, in order to orientate educational programs, re-skilling/up-skilling programs and placement activities towards one direction: the achievement of circular economic systems. The general term of “circular economy related opportunities” is meant to include: training and educational opportunities, job opportunities, entrepreneurship opportunities, corporate innovation opportunities, co-creation opportunities, community-based opportunities.

The value proposition of the Eco-Living Lab Academy is built on three branches of activities. The first one addresses students and young generations and aims to provide guidance and orientation about green jobs and the educational opportunities to land there. The second one focuses on company needs in terms of skills’ demand and focus on capacity building and knowledge transfer. This second branch is meant to stimulate a market demand for green jobs and their relevant skills, building a bridge between companies who need to upskill/reskill their workforce, companies with recruitment specific needs and citizens looking for employment opportunities. The third one addresses workers in need of professional reconversion.

The strengths of the Eco-Living Lab Academy are embedded in its methodology, which combines a multi-stakeholder knowledge with hands-on capabilities, and is easily scalable across different regions and Countries.