Skills Lab Network of Experts Live Event – 13/14 June 2022

CHALLENGE 1 – FUTURE SKILL NEEDS IN PROMISING ECONOMIC SECTORS

Vision statement: The country of Skilland becomes global leader in renewable energy production and technologies, attracts investments and generates high number of quality jobs in the sector and related value chain areas, which are taken by skilled workers at all professional levels.

Challenge to be tackled: ensuring the development of a system that allows the identification of sector specific skills and their development, so to equip people with the necessary skills to grasp opportunities offered by promising and rapidly growing sectors and to grant the attraction of investments.

Context

Skilland is heavily reliant on fossil fuels for its energy needs, with natural gas and oil accounting for 53% and 47% of total energy demand respectively (in 2018). Most of its energy is imported, mainly from neighbouring countries, which provides half of all-natural gas supply to Skilland and most of its total electricity production. As of 2018, energy imports accounted for 51% of Skilland's energy consumption, posing a real challenge to the country's energy security. In 2020, just 15% of energy production came from renewable sources, mostly wind, while the remaining 85% came from fossil fuels.

Since the introduction of the Energy Law and its later implementation, Skilland has begun to review its energy strategy for the next 20 years. The fundamental challenges for the Skilland's Government are to ensure energy security and implement its COP 21 commitments. These include reducing CO2 emissions by 40% by 2030 and meeting the renewable energy (RE) target by increasing the percentage of energy from renewables in the energy mix to 50% by 2030. The country has a high renewables potential, particularly in wind and solar, which the Skilland Government hopes to exploit.

Skilland pioneered a sustainability focus on energy production and consumption in the 1980s. This involved attempts to diversify energy resources, increase energy savings, strengthen country's energy independence, and reduce carbon emissions. This focus was implemented through three pillars: institutional, regulatory and financial. The key institution for the energy sector in Skilland is the National Agency for Energy Management. Other key players include the Skilland Company for Gas and Electricity and the National Observatory on Energy. The regulatory pillar is marked by the adoption of laws stating an ambitious political will to support energy efficiency and renewable energy investments.

The employment share of energy sector is rather small, constituting around 2% of total employment in the country. Out of this less than 10% are female workers, while tens of thousands of Skilland citizens

enter the labour market every year. In this context, changes in the energy sector can only be expected to play a modest role in job creation. However, the sector is likely to impact heavily on the national growth. The total level of expected employment will ultimately depend on the amount of renewable energy inputs produced in the country. A multiplier effect from investments in the energy sector can be anticipated both upstream – through the manufacturing of machinery and components – and downstream, within the communities where maintenance is delivered.

Various factors, such as growing energy consumption, the need to increase energy efficiency from production to distribution, and the large potential offered by renewable energy sources, make Skilland a particularly favourable environment for creating new job opportunities in the sector. Stakeholders believe that increased automation and digitisation will not reduce the overall level of employment in the future, also thanks to the current and expected growth in the renewable energies market and the need for monitoring and managerial competences.

While vertical profiles will be relevant especially for sub-sectors that are expanding or expected to do so, such as renewable energy, profiles with competences related to different energy related technologies (also traditional ones) will be in high demand due to their transversal relevance; moreover, they will be critical for supporting the energy transition, especially those with competences in energy efficiency, smart grids, and more efficient and sustainable energy management along the entire chain from production to consumption.

Three main weaknesses have emerged:

- Information about new skills needs in the sector are poor, they rely mostly on international literature that, however, may not be in line with the specificities of the country. Even if specific analysis are carried out, they are not systematic and regular, therefore become soon obsolete.
- Cooperation among actors in the sector exists but is not optimal. While companies need to respond to logics related to the business and international competition, the Public Administration is hampered by bureaucracy and “cultural” inertia. More openness to innovation would be needed.
- Reforming or updating the education and training systems takes an average of 4 to 5 years, while companies need to have workers with the skills needed on renewable energies to be immediately deployed.

Challenges

1. **How can Skilland develop a continuous monitoring system to produce information on new professional figures that will be needed to make the energy transition to renewables possible?**
    - How could a system of permanent monitoring of new emerging needs in the sector could be developed? What type of tools should be used to provide granular information on the different professional figures needed for the energy transition?
    - Could new digital tools be used to develop such a monitoring system?
    - What actors should be involved and with what types of mechanisms?
    - How could findings be shared and disseminated? How to make sure that policy makers pick up on these findings to elaborate new education, training and employment policies?
2. **What types of new learning mechanisms could be developed to become a pioneer country in renewable energies?**
    - How can Skilland ensure that new education and training courses are developed to follow the emerging needs in the energy market?

- Is there space for innovation in this field, for instance through the elaboration of short courses, in-company training, work-based learning experiences or others?
- How can education authorities be involved in the exercise and grant support? Is there a need to have a “champion” at Government level to make this happen? If yes, how such a personality can be involved?
- How can skills development become a key priority for the country?
- How can students and families be properly informed about emerging opportunities in the sector? Given the very low level of women’s employment in the sector, how could girls be attracted to study and work in the sector too?

3. **Are there models and virtuous examples that can be streamlined on skills anticipation and matching in energy sector??**

   - What mechanisms could be developed to give value to existing good practices and make them “systemic”?
   - Are there examples in other countries that could be taken as an inspiration and implemented in Skilland?

4. **How could Skilland attract both national and foreign investments in the energy sector?**

   - How could the country make sure that energy transition is perceived by all stakeholders as being the key priority for the national development?
   - Should there be a body or institution in charge of attracting more investments in the sector?
   - What should be done concretely to attract these investments?
   - What should Skilland do to apply for international funds available for the energy transition?