
# THE GAS SECTOR IN THE CONTEXT OF THE EUROPEAN ENERGY TRANSITION

APPROACHING A JUST TRANSITION FOR WORKERS

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# THE BACKGROUND OF THE PROJECT

- The climate emergency has come to the fore of media debates and the political agenda in recent years and against this global concern, the decarbonisation of energy systems and industrial sectors is one of the most important challenges of this century.
    - **The gas industry will be deeply affected by the transition and have a ubiquitous role to play in it.**
- The nature of the transition, and the economic and social impacts, will differ profoundly depending on sectors and activities in each region. Nevertheless, despite the differences, the transformation will impact job numbers and job types across the EU.
- To tackle this impact, the International and European trade union movements, along with employers' representatives, have stressed the need for a "just transition", defining it as a transition that "secures the future and livelihoods of workers and their communities in the transition to a low-carbon economy. It is based on social dialogue between workers and their unions, employers, and governments, and consultation with communities and civil society".

# THE SCOPE OF THE PROJECT

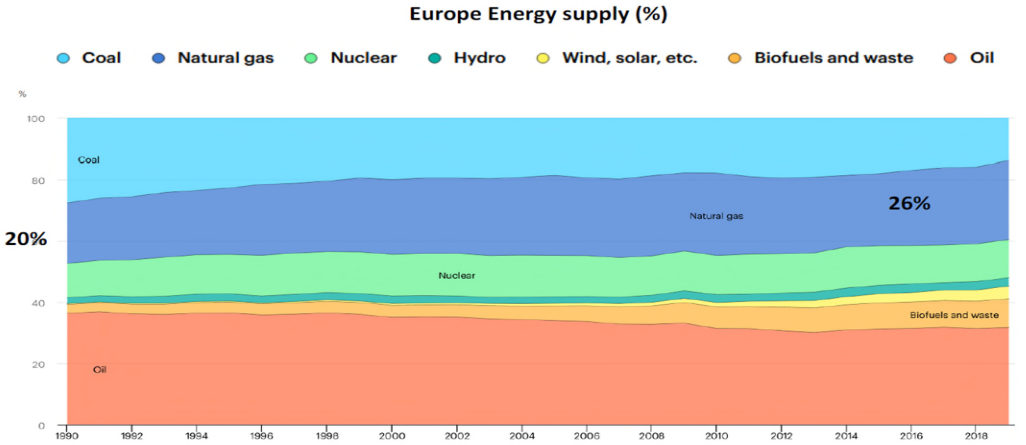
- The objectives of the project:
  - To get a a better understanding of the employment structure and challenges ahead in the context of o the energy transition
  - To address the uncertainties for the current and future workforce in the gas sector
  - To support the anticipation of change according to the principles of a Just Transition.
- The deliverables of the the project:
  - Final report including, inter alias, a breakdown of European employment per country and kind of operation in the gas sector, a description of actual skills and job profiles in the gas sector, a description of the relevant further developments in the sector or good practices providing valuable insights to the European gas sector, about the internal capacities/factors increasing the employability of workers
  - Roadmap
  - Joint recommendations for future action for social partners on national and European level and different stakeholders on how to mitigate the employment impacts of the transition in the gas sector.

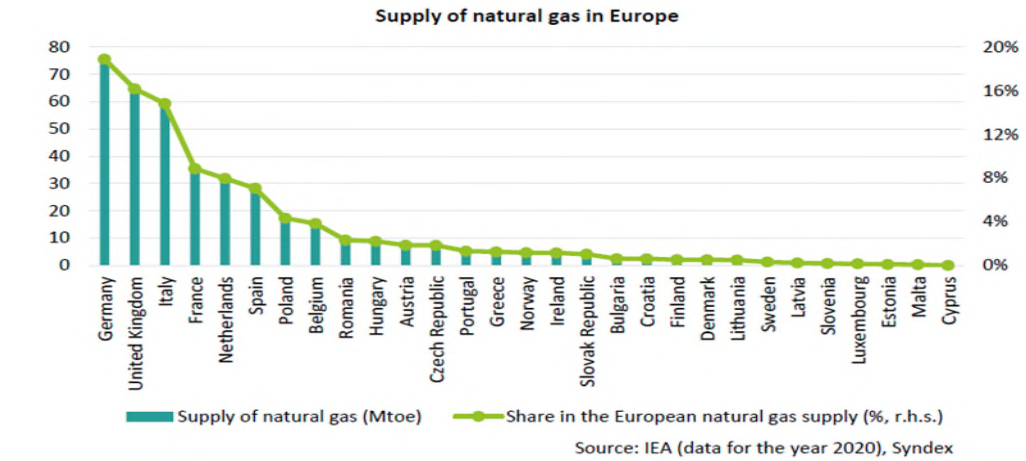
# The challenges of the gas sector towards its decarbonisation

# GAS PLAYS A MAJOR ROLE IN THE EUROPEAN ENERGY MIX

- Prior to the war in Ukraine, natural gas represented more than a quarter of Europe's total primary energy mix, second only to oil.

- However, most of the gas supply is concentrated in a small number of countries (Germany, United Kingdom, and Italy) accounting for half the gas supply. Those countries along with France, the Netherlands, and Spain, account for around three quarters of the European gas supply showing the significant disparities between European countries.




Source: IEA (data for the year 2020), Syndex

# GAS SECTOR MUST TACKLE THE EMISSIONS RESULTING FROM THE EXTRACTION, PRODUCTION, TRANSPORT AND USE OF NATURAL GAS (1)

- The technologies intended to decarbonise the gas sector have been identified.
- Two main routes rely on switching from natural gas to other commodities: biogas (mainly biomethane) and hydrogen.
  - CCUS technologies, used to produce hydrogen and capture industrial emissions, have also taken on new momentum in Europe.
- The aforementioned technologies are key issues for the decarbonisation strategy of the European Union:
  - REPowerEU called for 35 billion cubic meters (bcm) of biomethane by 2030 which would mean a 35% average annual growth rate from 2022-30
  - The European Hydrogen Strategy sets a target of installing at least 40GW of renewable hydrogen electrolysers by 2030 and producing up to 10 MT of green hydrogen.
    - The REPowerEU plan set an additional target of 10 MT of imports by 2030.
  - In November 2021, the Innovation Fund allocated 1.1 Bn € to 7 emissions reduction projects, 4 of which included CCUS.
- However, these technologies face important challenges that should be tackled to be fully implemented.

# GAS SECTOR MUST TACKLE THE EMISSIONS RESULTING FROM THE EXTRACTION, PRODUCTION, TRANSPORT AND USE OF NATURAL GAS (2)

- **Biomethane** has the advantage of being able to be transported and distributed in existing gas grids but:
  - the decentralised nature of biogas and biomethane production will require increasing injection points in the transport and distribution network.
  - the supply of renewable gas remains small today : the total injection of biomethane into the gas grid is less than 1% of the current demand for natural gas in Europe.
  - the sustainability of biogas depend on the development of circular economy and waste streams (incl. forest residues) to avoid conflict of land use.
  - Its production costs remain high.
- **Hydrogen** does not emit CO2 during use
  - On the contrary it generates emissions during its production from fossil fuels
    - two less emitting alternatives exist
      - Blue Hydrogen that can be produced from natural gas, and by adding CCUS technology, the CO2 emitted is captured and stored.
      - Green hydrogen is produced through the electrolysis of water, using renewable energy
  - Hydrogen is challenging to transport and distribute

## THE GAS INDUSTRY AT A CROSSROADS

- The future of the gas industry depends on scaling up different technologies, and to some extent on public support.
- The war in Ukraine and the subsequent energy crisis could act as an accelerator of change in the sector, but these crises have also brought uncertainty.
- The REPowerEU targets demonstrate the willingness of the European Commission to significantly develop green hydrogen and biomethane technologies, nevertheless it is still unclear what is expected for natural gas by 2030.

# #2

# The challenges of the gas sector with regards to the Just Transition

# ANTICIPATING CHANGES IN EMPLOYMENT, JOBS AND SKILLS AS A DIFFICULT TASK

- Several issues make it difficult to anticipate in a precise way the future of the sector in terms of employment, jobs and skills
  - The future of the sector will be as varied as current energy mixes and needs of end-users across Member States.
  - The literature on the socio-economic consequences of the decarbonisation of the gas sector is extremely scarce.
  - Exact figures on projected and actual job profiles constitutes material information that cannot be shared easily and that loses a level of clarity when overly aggregated.
  - Fast changing geopolitical and commercial landscape. Building scenarios on skills and employment at too high a level in this context would be a dubious enterprise.
- Nevertheless a best practice has been identified on this issue: the mapping performed by the French EDEC which
  - Links current jobs to technological, economic, and environmental changes
  - Helps determine the impact that these changes might have on job numbers and types of work
  - Identify trends for employment, future jobs, and skills.
- **Whilst the mapping provides evidence about the future for workers in the sector, those findings cannot be completely extrapolated to other countries or the companies active in them.**

# THE IMPORTANCE OF GOOD PRACTICES

- The angle taken in this project was to work on identified existing practices and tools in the field of green transition related to employment and skills in order to develop a methodology useful for the social partners when dealing with the challenges of the gas sector in terms of employment and skills.
  - **One of the main findings of this work is the crucial role of social dialogue and social partners in ensuring a just transition.**
- Aligned with this finding the methodology mentioned ahead puts social dialogue at the heart of the tools available to ensure a just transition. It is comprised of five steps, each of them relying on the fruitful cooperation of social partners:
  - Defining the work to be done in a joint way by social partners to guarantee its effectiveness and adherence.
  - Carrying out an inventory of jobs and skills in each European country.
  - Building scenarios for the evolution of the gas sector according to national and also local specificities.
  - Identifying future changes on jobs and skills needs.
  - Building career paths and identifying business bridges within the sector and with the outside world.

# A WIDE RANGE OF RECOMMENDATION AIMING TO GUARANTEEING A JUST TRANSITION

- The work done on the identification of challenges and good practices has led to the proposal of different recommendations aiming to guaranteeing a just transition.
- They all :
  - are the result of a common work of social partners and experts;
  - follow the same logic of identifying what already exists, mapping possible future scenarios, and devising the best methods for achieving it;
  - could be further implemented at the European, national, regional or company level.
- The list is not exhaustive and covers:
  - The methodology to be implemented to understand future challenges;
  - The issue of training;
  - The recognition of social dialogue as a key element in ensuring a just transition;
  - The attractiveness of the sector;
  - The connections to other sectors.

# THE SOCIAL DIALOGUE AT THE HEART OF NEXT STEPS

- **Training** as a major factor in the transformation of jobs and profiles : professional training, identification of career paths and making links between jobs (such as cross-sector recognition of qualifications) will be essential as well as developing and capitalising on good practices in companies, strengthening the links between private and public actors or setting up specific actions for VSEs and SMEs.

- **Improving the attractiveness of, and diversity in, the sector** as it suffers from a lack of attractiveness due to a negative perception of fossil fuels and a lack of understanding about the professions within the sector.

- **Connections to other sectors**: given the challenges of the energy transition, it seems appropriate to adopt a global approach to energy-related jobs and to facilitate reskilling and upskilling of employees from other sectors who could fill the recruitment gaps.

- **Social dialogue** as a key element in ensuring a just transition

    - **Establishing quality social dialogue at all levels of representation as a condition sine qua non to succeed in anticipating changes**
    - **Setting up stronger collective bargaining**

# SOME SPECIFIC FEATURES OF THE GAS SECTOR TO BE TAKEN INTO ACCOUNT IN ORDER TO SUCCEED A JUST TRANSITION…

- A very high proportion of small and medium-sized enterprises
  - This raises questions about the capacity of these companies to mechanisms in place to achieve the energy transition or guarantee a "coordinated" approach. Therefore, special attention should be put on these companies so that they are not left behind.
- It is at the crossroads of other industrial sectors leading to very strong competition for skills between sectors, due to the shortage of profiles universally demanded.
- There is a very large territorial disparity in terms of the location of companies. The role of local or regional public authorities, local operators and energy communities therefore becomes key to ensuring national parity, avoiding inequalities, and supporting a bottom-up approach.
- It employs very few women and is therefore subject to issues of inclusiveness.
- It is impacted by a lack of attractiveness due to negative perceptions of fossil fuels and a lack of knowledge of professions in the sector. This is compounded by a lack of attractiveness of technical jobs in comparison to the service sector and logistics.

# …TOGETHER WITH THE ALREADY VISIBLE MAIN TRENDS REGARDING SKILLS

- Quantitative estimates of the energy transition on employment is a difficult task as the future employment landscape highly depends on technological, commercial and geopolitical issues.
- On the contrary and from a qualitative point of view there is a widespread consensus on several facts:
  - The transition will require a major and sustained reallocation of labour across sectors, occupations and regions as well as significant investment in re- and up-skilling, retention of existing workers and attracting new workers.
  - Skills development will be a particularly important challenge as new capacities will be necessary, mainly in digitalisation, decarbonisation, innovation, internationalisation and resilience.
  - High demand is forecast for engineers, specialists and business professionals who have emerging technology expertise.
  - New job opportunities can be expected in design, innovation and product development, disassembling, remanufacturing, repair, administrative handling of new service contracts, resource scouting and information management.

# PREPARING THE JOBS OF TOMORROW STARTS TODAY

- Despite the challenges faced by the gas sector, the issue of future skills and jobs profiles and how to prevent the potential negative impacts of the European Energy Transition and make sure that the transition will be a Just One, must be tackled from nowadays.
- Stakeholders: public institutions (at every relevant level), companies and **social partners**.
- Tools:
  - Mapping best practices that could be replicated and developed in the gas sector whenever possible
  - Educational and vocational training
  - A sound methodology agreed by social partners aiming at
    - identifying the current jobs in the gas value chain
    - linking current jobs to technological, economic, and environmental changes
    - identifying trends for employment, future jobs, and skills.
  - Solid social dialogue and collective bargaining

# 5 STEPS METHODOLOGY

**INTRODUCTION**: adopting a methodology built with the social partners to guarantee its effectiveness and adherence

**FIRST STEP**: carry out an inventory of jobs and skills in each European country

**SECOND STEP** : build scenarios for the evolution of the gas sector according to national but also more local specificities

**THIRD STEP** : identify future changes in jobs and skills needs

**LAST STEP :** Build career paths and identify business bridges in the sector but also with the outside world

# JUST TRANSITION : KEY REQUIREMENT OF THE PARIS AGREEMENT AND A PREREQUISITE FOR A SUCCESSFUL DECARBONISATION PROCESS

- According to the Just Transition Centre & The B Team a sound development of just transition consists of three phases:
  - Engage: ensure social dialogue with workers and their unions, and potentially the government; consult broadly with key stakeholders such as communities.
  - Plan: collaborate to produce a concrete, time-bound enterprise and sectoral plan for just transition, including emissions reductions.
  - Enact: deliver plans and advocate for broader action to promote a just transition.
- For companies, a just transition is a process whereby the company plans and implements efforts to reduce emissions in a way that maintains and improves employment, maximises positive consequences for workers and local communities, and allows the company to take advantage of business opportunities.
- From an employee perspective, the implementation of a just transition ensures there is as little negative impact as possible on jobs or even no negative impact at all.
- **In any case, the basis for a just transition is social dialogue between employers, employees, and trade unions**

# GOOD PRACTICES IN JUST TRANSITION

- A wide range of different good practices have been developed or are being developed for a just transition.
- Good practices can be found:
  - in the gas sector where there are initiatives at every relevant level: international, European, national and local but also at company level.
  - in other sectors  where they can serve as a reference and benchmark
    - “Just transition in Germany regarding coal communities”
    - “Just transition for urban transport workers” as agreed by the International Transport Workers’ Federation
  - as part of national and governmental policies
    - Approval in Spain in 2019 of the Just Transition Strategy: a five-year plan including, among other tools, the Just Transition Agreements and an intervention mechanism for the most vulnerable areas of the country or sectors, i.e. the Urgent Action Plans. The Just Transition Strategy sets up also the tripartite agreements with trade unions and companies in the sectors concerned, involving these agents in the establishment of obligations and rights that allow progress to be made in the transition.

# A VARIETY OF GOOD PRACTICES BUT COMMON CONDITIONS SINE QUA NON TO GUARANTEE A SUCCESSFUL JUST TRANSITION (1)

- **The importance of allocating significant financial means and resources** as shown by the British ("North Sea transition deal") and Danish examples at governmental level.
  - UK: the Deal will commit to delivering investment of up to £14-16 billion by 2030 in new energy technologies, with the government delivering a business model to enable CCUS and hydrogen at scale
  - Examples are also to be found at company level: Engie has established a dedicated budget of €100M for training following the agreement signed in 2016 with EPSU, IndustriAll Europe and FETBB
- **The importance of common work between all the stakeholders whether public or private**.
  - The Italian company Enel and Filctem-Cgil, Flaei-Cisl and Uiltec, have signed a protocol setting out a framework of labour relations in the context of the twin digital and climate transition. Most importantly it extends to cover suppliers and subcontractors.
  - The Spanish company Naturgy, following the closure of thermal power plants, signed an agreement on just transition  together with unions and the Spanish government.

# A VARIETY OF GOOD PRACTICES BUT COMMON CONDITIONS SINE QUA NON TO GUARANTEE A SUCCESSFUL JUST TRANSITION (2)

- **The importance of setting up adequate mechanisms with regard to training and re-skilling**.
  - Naturgy has implemented a Vocational Training Programme for Employability.
  - GRDF, GRTgaz and the organisation "Les canalisateurs" have created, in partnership with the French national education system and 9 CFAs, a new gas-specific training course leading to a vocational baccalaureate and the title of gas technician.
- **The need to have a strong social dialogue to obtain better outcomes** as highlighted by the ILO and the IEA.