

# JOBS IN GREEN TRANSITION

## NORDIC CLEAN ENERGY WEEK



### CONCLUSIONS FROM THE WORKSHOP

The Nordic countries are among the best in the world when it comes to national energy systems and innovative approaches to the green transition. In 2017, 43% of electricity consumption in Denmark came from renewable energy. Sweden is a world leader in ethanol research and biomass production, 90% of bioenergy coming from the forestry sector. Norway leads the way for electric cars, having one of the highest numbers of electric cars per capita in the world. Thanks to geothermal sources, 85% of primary energy supply in Iceland derives from domestically produced renewable energy sources. And, Finland has recently announced its ambition in becoming the world leader in circular economy by 2030.

On the occasion of the Nordic Clean energy week, the Association of Nordic Engineers, ANE, gathered together an expert panel to explore the impact of the green transition on the role of engineers and employment trends. The transition to a green circular economy is clearly already underway and requires a mix of policies, long-term provisions and investments.

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*“The green transition is not a quick fix, it requires a mix of policies, long-term provisions and investments”*

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“People in finance were not the first ones on barricades fighting for the green shift, but this is changing. Investments in green energy have grown sharply the last decade but are still not enough to fulfil the Paris agreement,” stated *Thina Saltvedt, Senior Analyst at Nordea Markets*. This is partly due to growing concern among investors about climate change and inadequate disclosure from companies, and challenging task for financial sector of putting a price on climate risk.

Alongside the financial aspects, policy-makers need to be better informed about energy resources so that they can put long-term solutions in place to enable decreases in demand for fossil fuels. “Our transport sector is predominantly dependent on fossil fuels. As soon as there are political solutions for phasing-out fossil-fuel subsidies and there is a competition, industries will follow and adapt. The technology is already there,” outlined *Brian vad Mathiesen, Professor Energy Planning at Aalborg University*.



Brian further argued: “We should stop thinking about creating jobs that can generate growth, we should create jobs that help the green transition. The new demand will come and will create new jobs, but we might face the problem of not having skilled and flexible workforce to adapt to this demand.”

Statistics from the recent International Labour Organization report support this view. The report estimates that 24 million new jobs worldwide, accounting 2 million for Europe, will be created by 2030 if the right policies to promote a greener economy are put in place.

Re-skilling has become a buzz word, an antidote for all challenges that our modern society faces today due to the technological development. Remarkably, the process of transitioning towards a green economy seems to be a sustainable job creator. However, there are few concrete proposals on how to ensure the workforce can foster the green transition. “We proposed to set-up a just transition fund to get people on board for this transition, unfortunately it didn’t reach the politicians ear,” *Benjamin Denis, Energy Policy Adviser from the European Confederation of Trade Unions* informed the gathering. “This transition requires also solidarity to close the geographical gap of job losses and gains across Europe,” further underlined Benjamin.

*Juliane Marie Neiiendam, Chair of Labour Affairs Committee in the Danish Society of Engineers* stressed the importance of extending transition processes beyond the Nordic region. “Exporting Nordic knowhow is the way to closing the geographical gap and attracting new workforce. By using the knowledge of our members, we have created energy scenarios that are based on a cost efficient green transition that leads to jobs and export potentials. This is also our way to engage and inform our engineers.” Juliane outlined that through engineering members’ expertise, decision makers can be presented with viable scenarios on how to ensure new jobs within the new green technologies.



However, *Pyry Niemi, Chairman of the Committee for Growth and Development in the Nordic Council* pointed out that politicians were not sufficiently “well educated” about the energy efficiency and energy resources mix. This sometimes led to wrong financing decisions. He suggested that the energy sector should be more market oriented and in the Nordic region, countries should better cooperate when it comes to energy surpluses.

Benjamin countered the idea of having a deregulated energy market. “This hinders technological breakthroughs, as the pay-back time is too long. Policy interventions are needed when the market doesn’t deliver and policy decisions should be clear about who bears the costs of fossil fuels.”

*Monica Normark, Project manager from Sekab E-technology* also underlined the importance of Nordic cooperation, through initiatives such as the creation of a Nordic bioenergy market. “We need long-term policies that support the creation of a renewables value chain and create a strong fossil-fuel free Nordic region.” She also emphasised the role of engineers, by stating: “Engineers and technologists have an answer when it comes to the technologies needed to overcome climate change challenges. Your company or institution will only benefit, if you hire an engineer!”

[Read more and see videos from the day here](#)



The Nordic Clean Energy Week took place simultaneously in Copenhagen and Malmø 21. – 25. May. This workshop was organized in collaboration with EnergyLab Nordhavn and representatives from ANE member organisations.

The team who made it happen:



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### WHEN AND WHERE

23 May 2018

11.30 – 15.30

#### EnergyLab

Sundkaj 7, 2150 Nordhavn

Register for the workshop by sending an e-mail with participant(s) name and organization to Mads Tømmering: [mto@ida.dk](mailto:mto@ida.dk) **no later than by May 15<sup>th</sup> 2018.**



### ANE WORKSHOP

The [Nordic Clean Energy week](#) takes place in Copenhagen and Malmö from 21 until 25 May 2018. During this week, different actors including [Clean Energy Ministerial](#) and [Mission Innovation](#) will run various activities in parallel in both cities. [The Association of Nordic Engineers](#) (ANE) in cooperation with [EnergyLab](#) will host a workshop about the jobs in the green transition and the views of Nordic engineers on this topic.

### Theme of the workshop

The Nordic countries are among the best in the world when it comes to national energy systems and innovative approaches to the green transition. This is due to a strong focus on innovation, technology and skills in private businesses and research institutions, as well as due to solid public/private financing models.

The transition to a greener economy will create jobs of the future. The conservative estimates from the scientific community tells that there is a need to be off carbon everywhere in the world in four decades, if the goals of the Paris Agreement are to be met.

This massive shift in energy infrastructure is not going to be built by robots or by artificial intelligence – this shift in infrastructure needs human hands. This means mass employment for two generations across all sectors involving low-skilled, semi-skilled and professional labour.

According to the International Labour Organisation, at least half of the global workforce - the equivalent of **1.5 billion people** - is affected by the transition to a greener economy.

The role of engineers in this green transition is paramount. By fostering innovation engineers create the technological environment necessary for the transition to a low-carbon economy.

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*“Making energy green, cheap and universally available is the driver of mass employment”*

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**Draft Programme**

**11.30 – 12.30:** Networking lunch

**12.30 – 14.00:** Experts sharing knowledge – presentations followed by Q&A

Our speakers:

- Thina Saltvedt, Senior Analyst, Nordea Markets
- Brian Vad Mathiesen, Professor Energy Planning, Aalborg University
- Monica Normark, Project manager, PhD, Sekab E-technology

**14.00 – 14.15:** Coffee break

**14.15 – 15.15:** Interactive political discussion in a panel debate incl. Q&A

Our speakers:

- Juliane Marie Neiiendam, Chair of Labour Affairs Committee, IDA
- Pyy Niemi, Chairman of the Committee for Growth and Development, Nordic Council
- Benjamin Denis, Energy Policy Advisor, European Trade Union Confederation

The panel debate will be facilitated by two moderators: Inese Podgaiska (ANE) and Jenny Grensman (Sveriges Ingenjörer) and will cover various themes related to jobs in the green transition including:

- How should corporations, industries and political institutions seize the momentum of the green transition?
- How to accelerate and maintain the best possible conditions for investors and move climate investments from niche to mainstream?
- Which is the biggest challenge of the green energy transition and how to overcome it?

**15.15 – 15.30:** Concluding remarks and closure

**ACTIVITIES IN ENERGLAB AFTER THE WORKSHOP**

After the workshop it will be possible to visit the demonstrations of the smart energy solutions available at the EnergyLab showroom and learn about the new urban energy infrastructure of the future.