The role of ESCOs in the context of Nationally Determined Contributions (NDCs)

Frauke Röser (NewClimate Institute)

Webinar Global ESCO Network
7 July 2021
Agenda

1. Paris Agreement – key elements
2. Status and outlook 2021
3. What does 1.5°C mean at the sector level
4. Planning, entry points and opportunities
NewClimate Institute

- Climate policy think tank
  - Founded in 2014
  - Based in Cologne and Berlin, Germany
  - Ca. 35 colleagues

- Areas of work
  - International climate policy agenda
  - Supporting the implementation of the Paris Agreement
  - Analysis and conceptual work on climate policy, climate finance, market mechanisms
  - Linking to sustainable development agenda

- Associate member of the NDC Partnership
Global:

» 1.5/2°C: Limit temperature increase to „well below“ 2°C and efforts to limit to 1.5°C

» Global GHG emissions to reach net zero in the second half of the century (and negative thereafter)

» Alignment of all financial flows with the goals of the Paris Agreement (Article 2.1c)

National:

» All countries submit national commitments (Nationally Determined Contributions, NDCs).

» Contributions to be updated every 5 years showing an increase in ambition until global goal is achieved

» Framed by long term low emission development strategies (LTS) to be submitted in 2020/2021
NDC and LTS planning cycles

Submission by 2020

2020
NDC to 2030

Submission by 2025

2025
Potential LTS revision
NDC to 2035

Submission by 2030

2030
Potential LTS revision
NDC to 2040

Updated NDCs in 2020 may not be informed by LTSs, given current timelines.

Updated NDC target for 2030, 2035 and/or 2040

Updated NDC target for 2035 and/or 2040

Source: NewClimate Institute, 2020
We already lost a lot of time…
Assessment of current NDCs

Quelle: www.climateactiontracker.org
Status of updated NDCs in June 2021

CLIMATE TARGETS
Status of the NDC update process

59 Countries have submitted new NDC targets (58 countries plus the EU27)
- 13 Countries we analyse have submitted stronger NDC targets (12 countries plus the EU27)
- 9 Countries we analyse did not increase ambition
- 37 Countries we do not analyse submitted new NDC targets

7 Countries have proposed new NDC targets
- 6 Countries we analyse have proposed stronger NDC targets
- 1 Country we analyse stated it will not propose more ambitious targets
- 0 Countries we do not analyse proposed new NDC targets
- 98 Countries have not updated targets

Last updated: Jun. 25, 2021
Map is for reference only
Long-term strategies: net zero gaining momentum

**Net zero emissions target announcements**
- Countries with no net zero target: 27%
- United States: 12%
- China: 25%
- European Union (EU27): 7%
- Other countries with similar net zero announcements: 29%

Global emissions covered: 73%
Long-term strategies: net zero gaining momentum

What does climate neutrality mean?

- All countries need to reduce emission to zero.
- Different sectors decarbonise at different speeds.
- Some sectors are easier to decarbonise and need to compensate for others.
- Countries have different starting points - with industrialised countries needing to decarbonise faster.
- Significant progress needs to be made by 2030 – global emissions halved.
- Huge transformation challenge...

(Webinar - Global ESCO Network)

What needs to happen for 1.5°C?

- Renovate 3–5% of buildings per year
- New buildings zero emissions from 2020
- Sustain renewables growth
- No new coal power plants
- Last fossil fuel car sold before 2035
- Develop 1.5°C vision for aviation & shipping
- New industrial installations low carbon after 2020

www.climateactiontracker.org
(Climate Action Tracker, 2016)
Role of energy efficiency for 1.5°C pathway

- Electrification: 20%
- RE based CO₂ removals (BECCS): 14%
- FF based CO₂ removals (CCS): 6%
- Hydrogen: 10%
- Renewables: 25%
- Energy efficiency: 25%

Total CO₂: 36.9 Gt

Source: IRENA, World Energy Transition Outlook, 1.5°C pathway, 2021
Investments need to scale up significantly…

Source: IRENA, World Energy Transition Outlook, 1.5°C pathway, 2021
Buildings emission intensity needs to reduce by at least 90 – 95% by 2040 for Residential and Commercial.
Benchmarks – Electrification of industry

Share of electricity in final energy in industry needs to reach close to 50% by 2050 globally.
Planning processes and entry points

» Cross ministerial NDC and LTS planning
  • Bottom-up approach – sector strategies and plans
  • Top-down – high level target distributed to sectors

» Integrated planning needs to be reinforced
  • Alignment of national level strategies (NDCs), sector strategies, subnational strategies and plans

» Finance and budget constraints key issues in particular post COVID

» Companies, cities, subnational governments increasing climate commitments/neutrality targets
  • Energy use of buildings and facilities core part of climate strategy

» Non-state action – strong presence at the UNFCCC level
  • Global climate action platform
  • Race to Zero Campaign
Conclusions

» **Urgent need to scale up global ambition** to halve emissions by 2030 and get on a 1.5°C compatible pathway - this NDC cycle is critical!

» Decarbonisation of the **energy sector** needs to happen faster to allow for emissions in hard-to-abate sectors

» **Energy efficiency is an important element to enable full decarbonisation** of the energy sector – cost effective mitigation measure

» National governments face **finance constraints** – cost considerations and co-benefits of climate action are key drivers

» Entry points for ESCO in **planning processes** at national and subnational levels

» Opportunity to **increase visibility** in international space
Thank you

Frauke Röser
+49 151 68409310
f.roeser@newclimate.org