

Lessons learned from development of the SDG 7 Roadmap for Timor-Leste

NEXSTEP

National Expert SDG Tool for Energy Planning

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8 November 2023



Objective of this Presentation

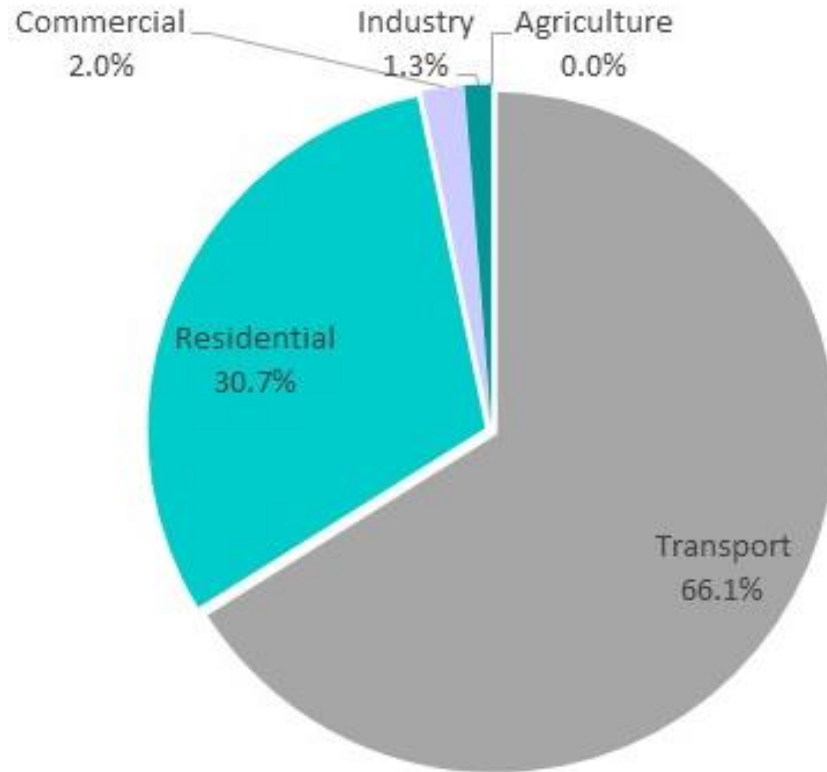
- Energy sector overview of Timor-Leste
- Targets and commitments for the energy sector
- The need to develop the SDG 7 Road Map
- Activities undertaken so far
- Indicative results from the SDG 7 Road Map
- Way forward



Energy sector overview

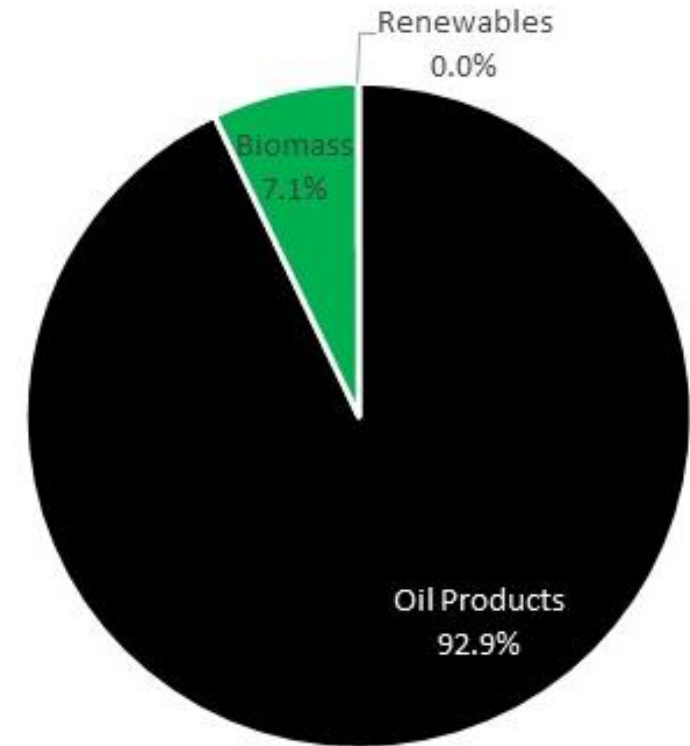
Total final energy consumption (TFEC) in 2021 by Sector

175.5 ktoe



Total Primary Energy Supply (TPES) in 2021

291.4 ktoe



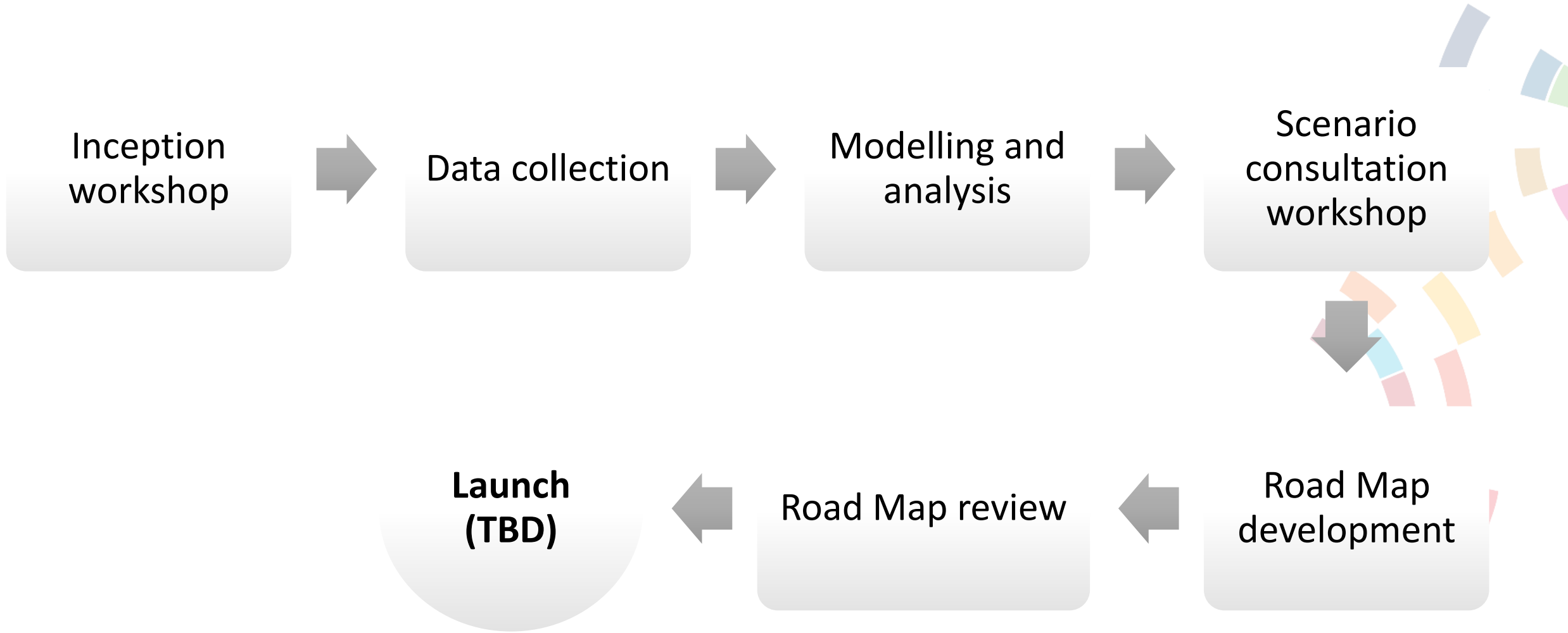
Targets and commitments for the energy sector

- **Timor-Leste Strategic Development Plan 2011-2030:**
 - provide electricity access to all households by 2030.
 - No families in Dili will have to cook with firewood by 2020.
- **Regulation on Fuel, Biofuel, and Lubricant Quality Standards and Specifications:** blending of Biofuel is limited up to a maximum threshold of 20 per cent by volume
- **Program of the 9th Constitutional Government:** The Government is committed to modernize and expand its energy system by utilizing renewable energy.

Development of SDG 7 Road Map

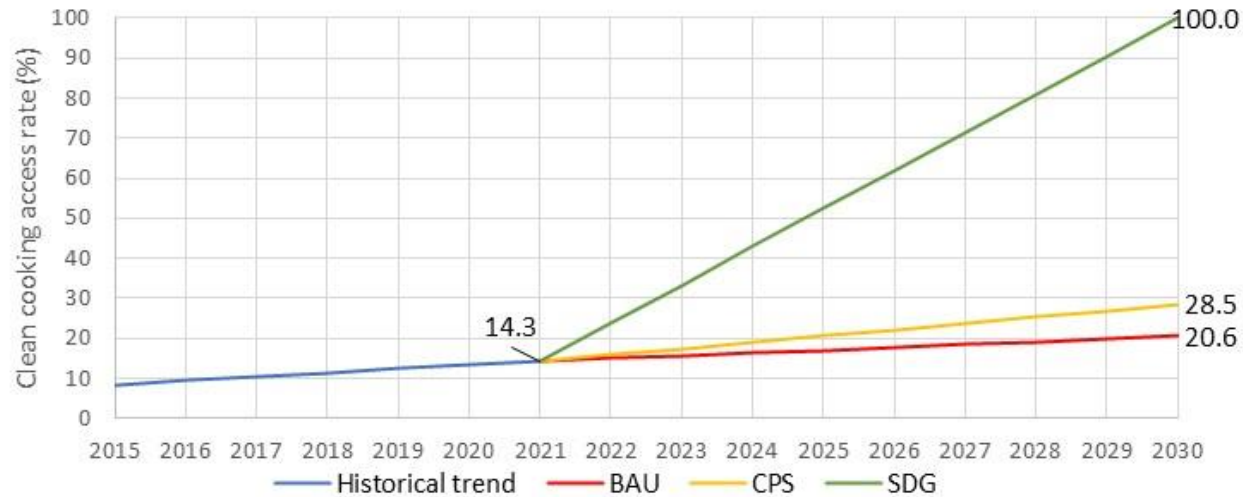
- The Government is committed to accelerate the sustainable energy transition
 - Interested to achieve SDG 7 targets and increase renewable energy to reduce reliance on petroleum fuel
- The Government of Timor-Leste requested ESCAP to support the development of SDG 7 Road Map
- ANE I.P. collaborated with ESCAP on this topic
 - The Road Map is currently being developed

SDG 7 Road Map – the journey

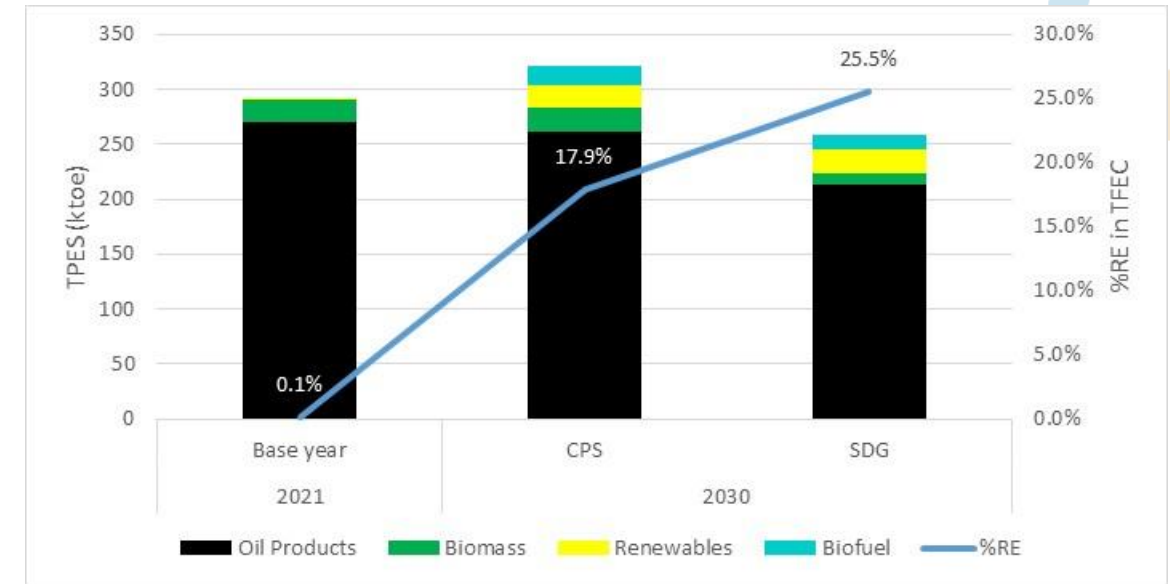


Assessment of the SDG 7 targets

Access to clean cooking fuels and technologies by 2030



RE share in TFEC , compared with RE in TPES



Assessment of the SDG 7 targets ...contd

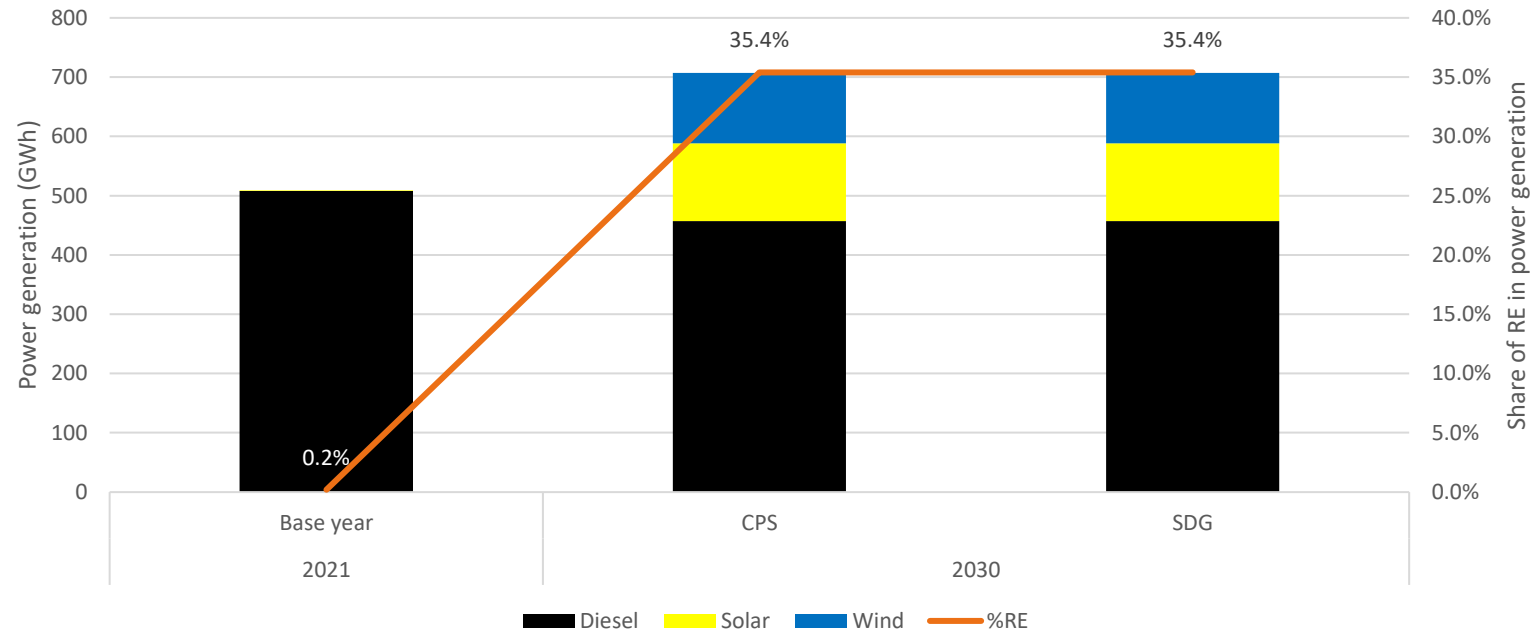
Sector	Measure	Energy demand reduction in 2030 (ktoe)
Residential - Cooking	Electric cook stove and ICS to remaining households	5.5
Residential – MEPS	Increase the adoption of energy-efficient lighting, air conditioner, refrigeration, and television	10.3
Transport – Cycling walking	reducing passenger km of motorcycle by 10 per cent by encouraging cycling/walking	
Transport – Fuel economy	Implement routine inspection, maintenance, and scheduling in to reduce energy consumption by 15 per cent	30.5
Transport – EV	20 per cent EV motorbike and 20 per cent EV car	
Commercial - GBC	Increase the adoption of energy-efficient appliance – 8 per cent electricity reduction	0.4
Total		46.7



Power generation in the SDG scenario

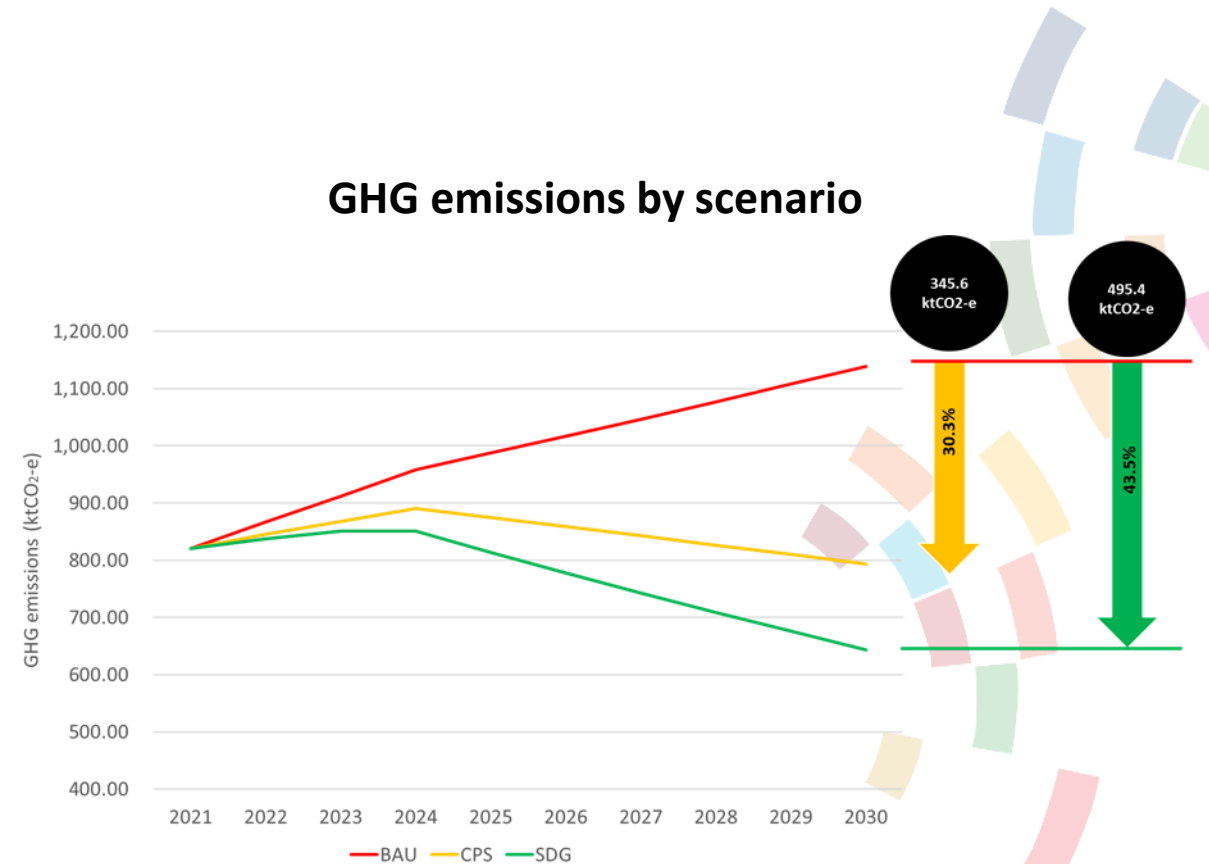
- Timor-Leste plans to implement 72 MW solar and 50 MW wind by 2024 and 2026 respectively.
- This will increase RE share in power generation from 0.2% in 2021 to 35.4% in 2030.

Power generation mix in different scenarios



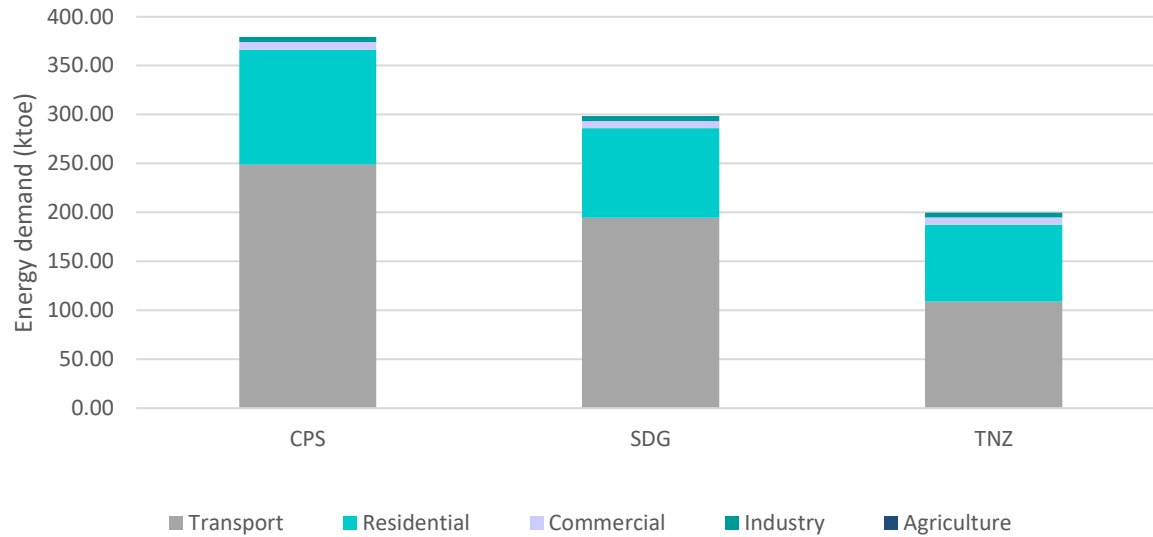
GHG emissions from the energy sector

- Under the current policies, GHG emission from the energy sector are expected to drop by 30% by 2030, compared to the BAU level.
- The energy efficiency measures that are planned under the SDG scenario will contribute to further reduction resulting a 43.5% drop by 2030.

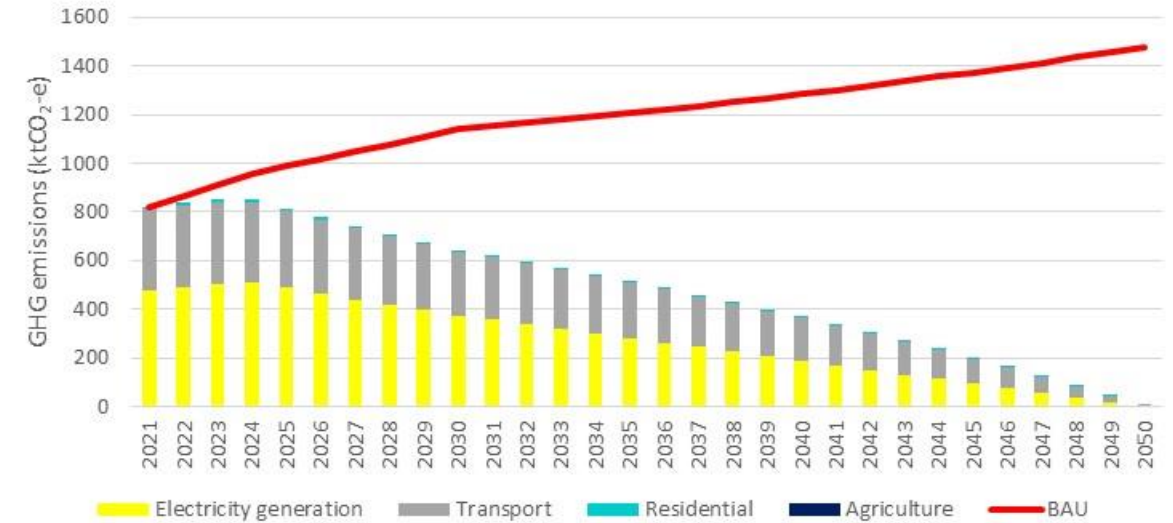


Net zero emissions by 2050

Energy demand by scenario



Emissions trajectory in the net zero scenario



Policy recommendations

- Strong policy measures are required to address the gap in access to clean cooking by 2030
- Increasing the efficiency of energy use in residential and commercial sectors should be pursued
- Transport sector energy efficiency measures and e-mobility are the key to achieving substantial energy savings and emissions reduction
- Decarbonization of the power supply is the key to achieving net zero emissions by 2050

Thank you

