

Lessons learned from development of the SDG 7 Roadmap for Mongolia

NEXSTEP

National Expert SDG Tool for Energy Planning

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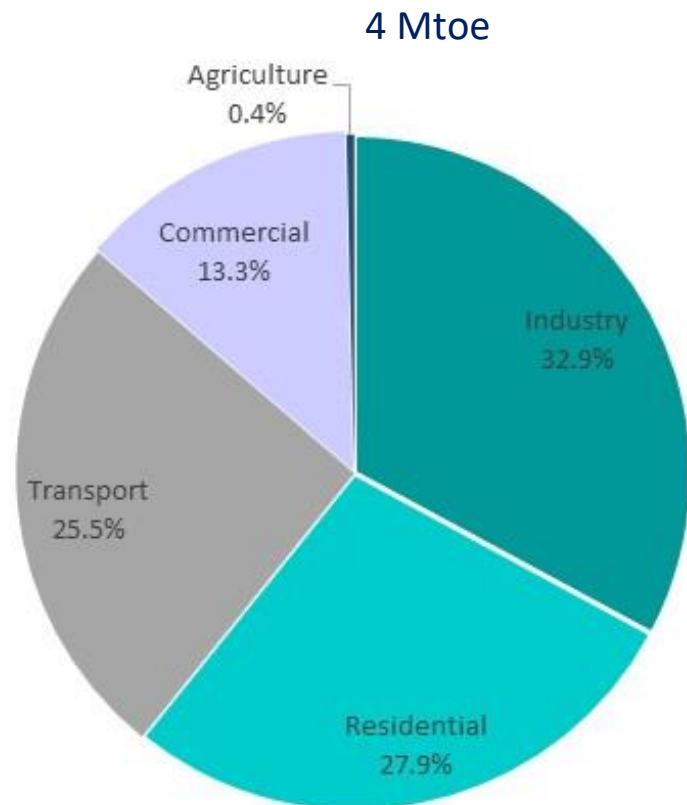
Objective of this Presentation

- Energy sector overview of Mongolia
- 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

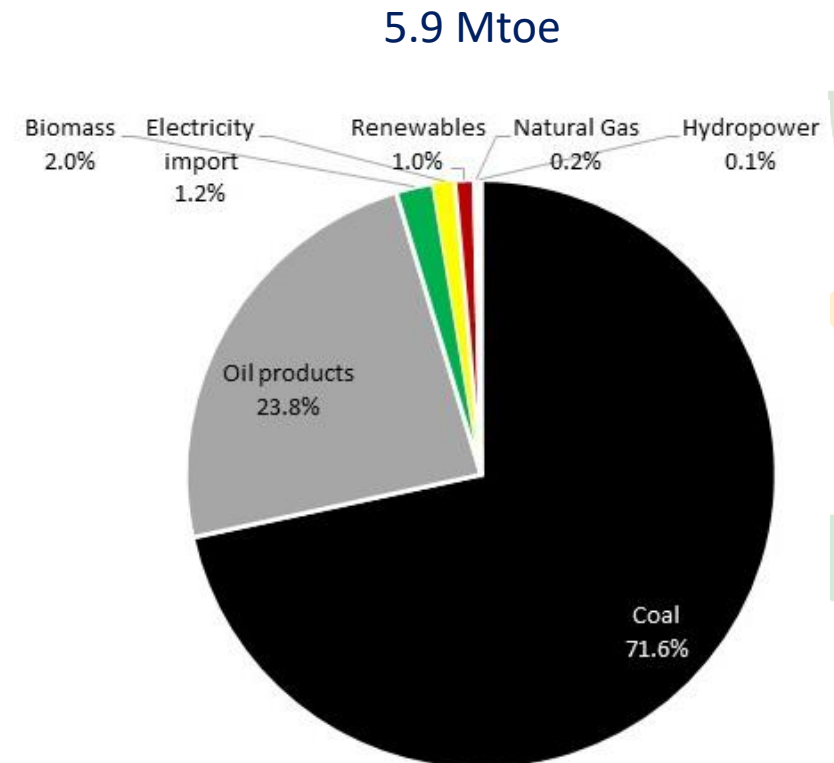


Energy sector overview

Total final energy consumption (TFEC) in 2021 by Sector



Total Primary Energy Supply (TPES) in 2021



Targets and commitments for the energy sector

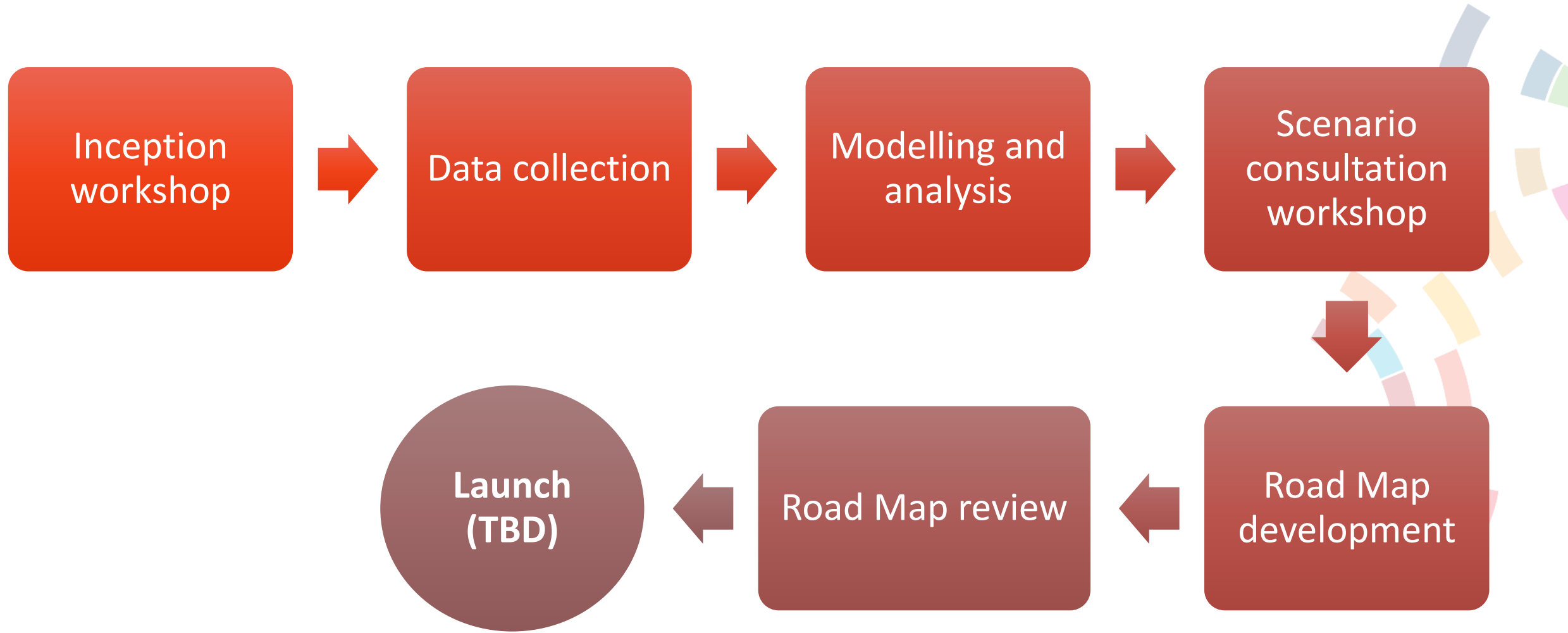
- **Mongolia Green Development Policy:**
 - Reduce GHG emissions from the energy sector by increasing EE by 20%
 - Reduce heat losses in buildings by 20% and 40% BY 2020 and 2030, respectively
- **New recovery policy:**
 - Thermal power plant expansion projects
 - New energy source construction projects
 - Sub-plants and aerial transmission lines construction projects
 - Environmentally friendly, science-based and high-tech energy projects
 - (Nuclear, green-hydrogen, natural gas and renewable energy projects)
- **Mongolia sustainable development vision 2030:**
 - Increase RE share in TFEC to 25% by 2025 and 30% by 2030
 - Commission of a nuclear power plant by 2030
- **NDC**
 - The unconditional and conditional targets are 22.7% and 27.2%, respectively.



Development of SDG 7 Road Map

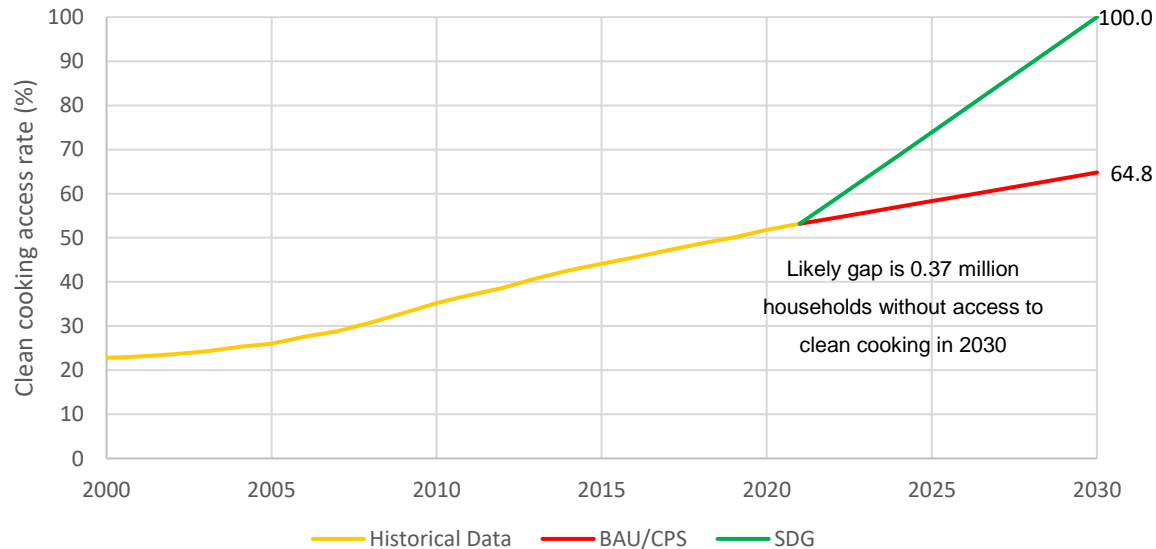
- Mongolia is committed to accelerate the sustainable energy transition
 - Interested to achieve SDG 7 targets and increase renewable energy to reduce reliance on fossil fuel, particularly use of coal in power generation
- The Government of Mongolia requested ESCAP to support the development of SDG 7 Road Map
- The Ministry of Energy collaborated with ESCAP to develop the SDG 7 Road Map
 - The Road Map is in its final stage

SDG 7 Road Map – the journey

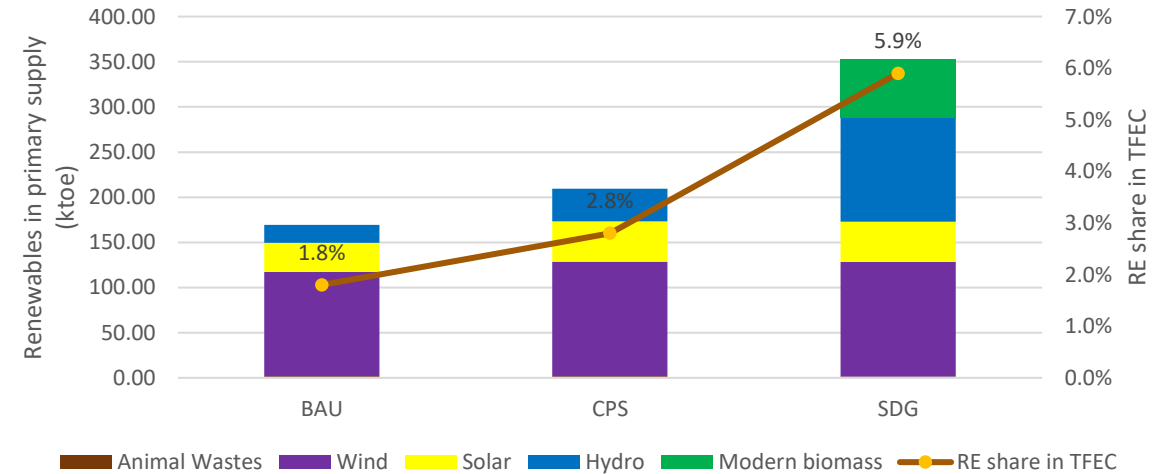


Assessment of the SDG 7 targets

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

Major energy savings include

- **RESEIDENTIAL SECTOR**

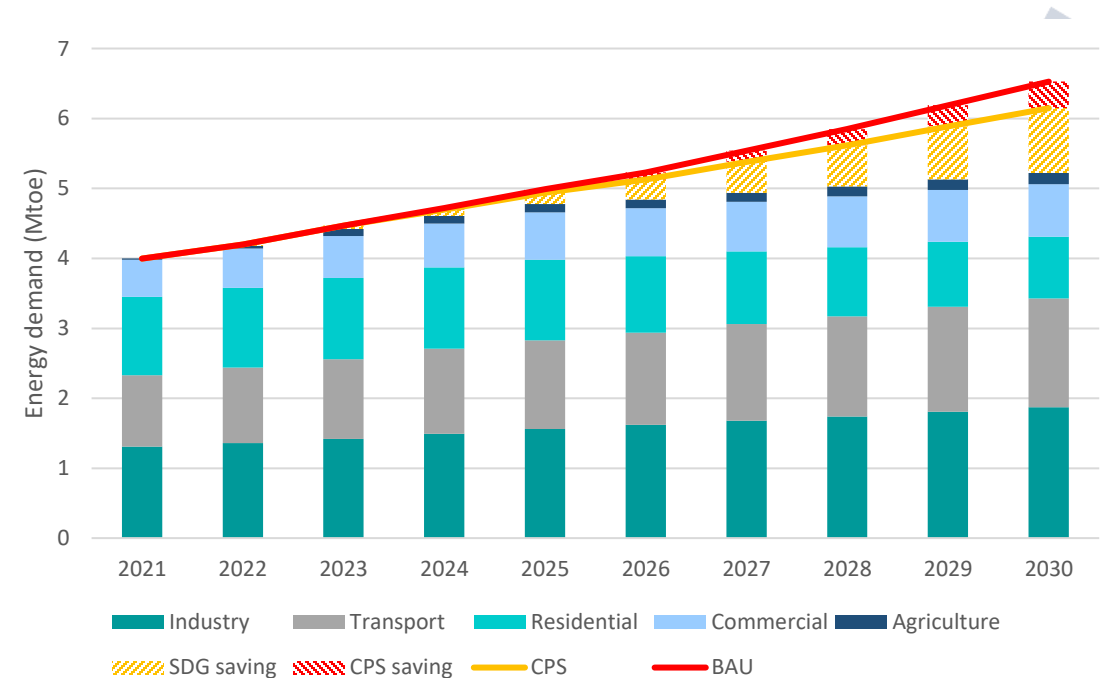
- Transition to efficient cooking system
- Improving building envelope
- Replacing raw coal with improved biomass heating
- Introduction of MEPS

- **INDUSTRY SECTOR**

- Introduction of energy audit
- Improvement of motor efficiency
- Improvement of combustion efficiency
- Minimisation of heat losses from boilers

- **TRANSPORT SECTOR**

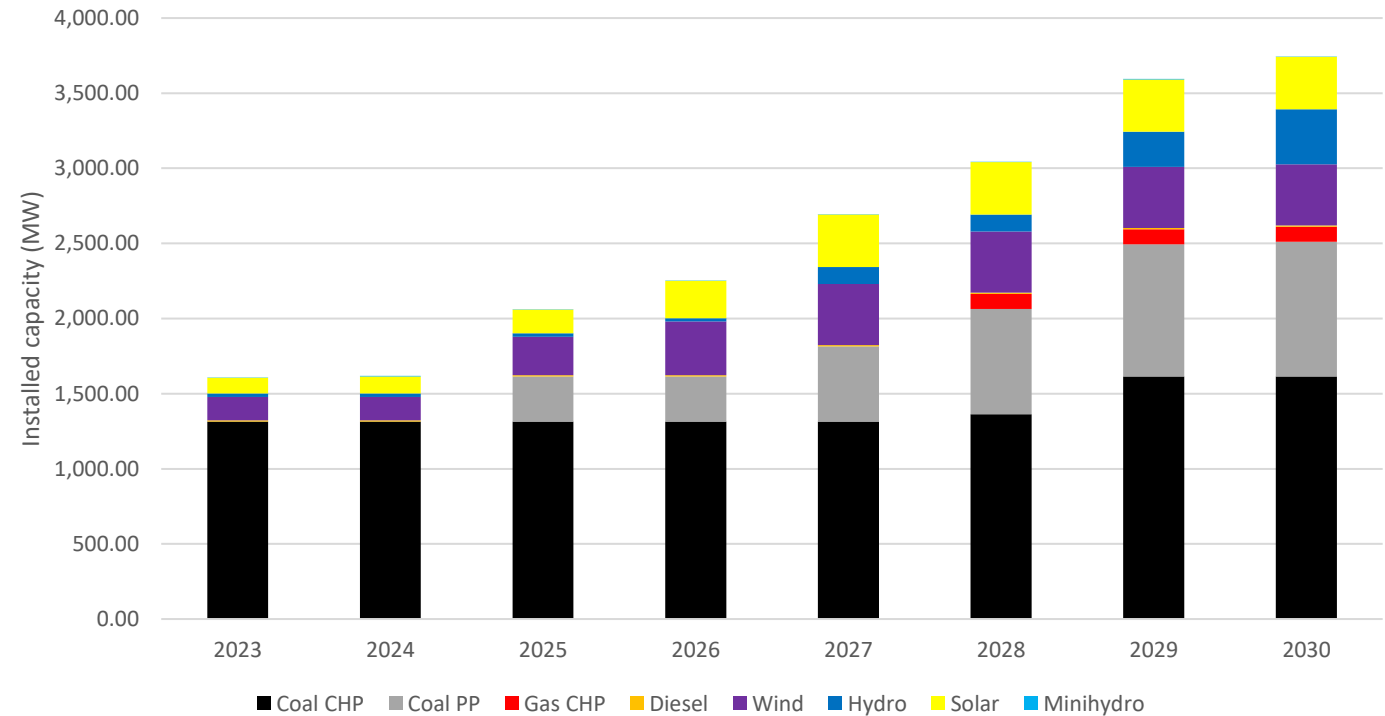
- Introduction of electric vehicles for passenger cars and busses, as well as for freight trucks



Power generation in the SDG scenario

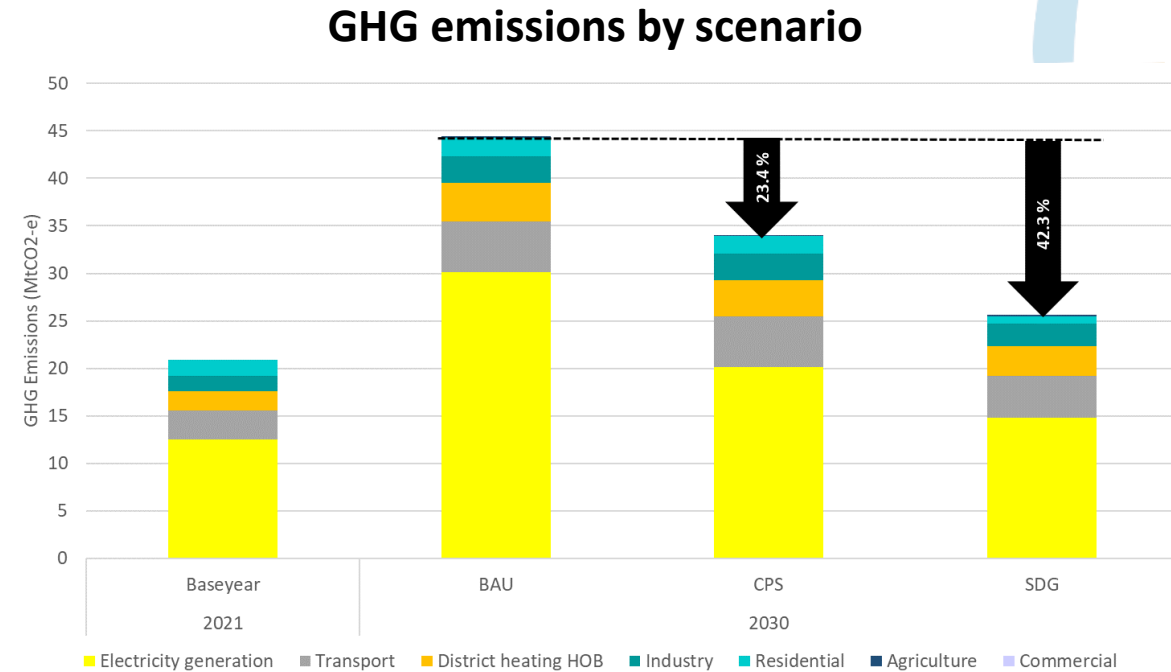
- Coal-fired power generation will be limited – replaced with hydropower
- Renewables share will be increased to
 - 30% in installed capacity by 2030
 - 22.3% in generation by 2030

Power generation mix in the SDG scenario



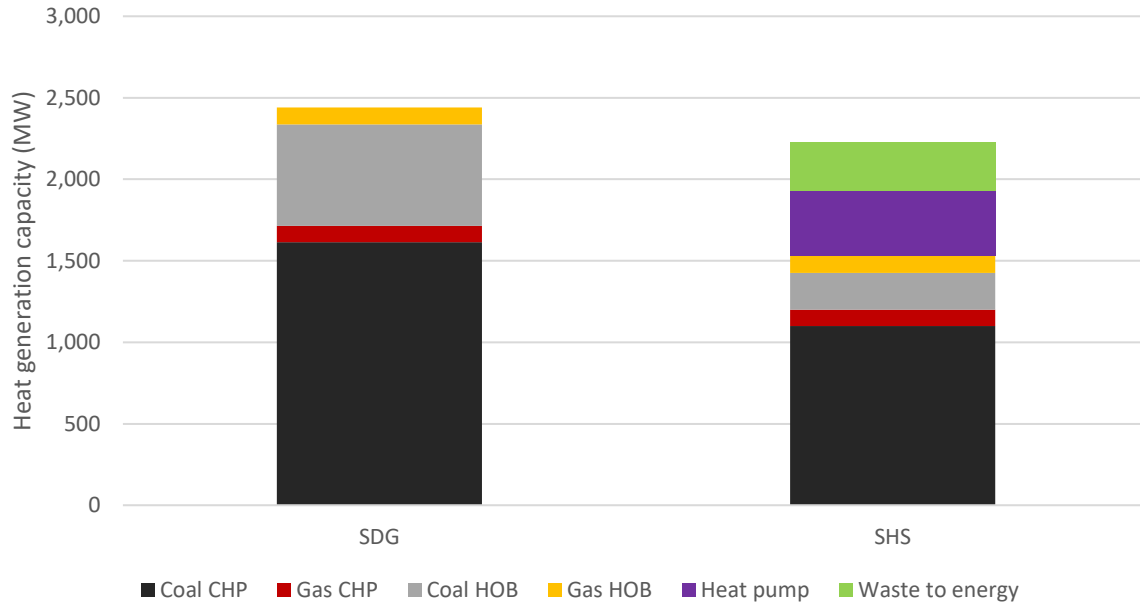
GHG emissions from the energy sector

- Under the current policies, GHG emission from the energy sector are expected to drop by 23.4% 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 42.3% drop by 2030.

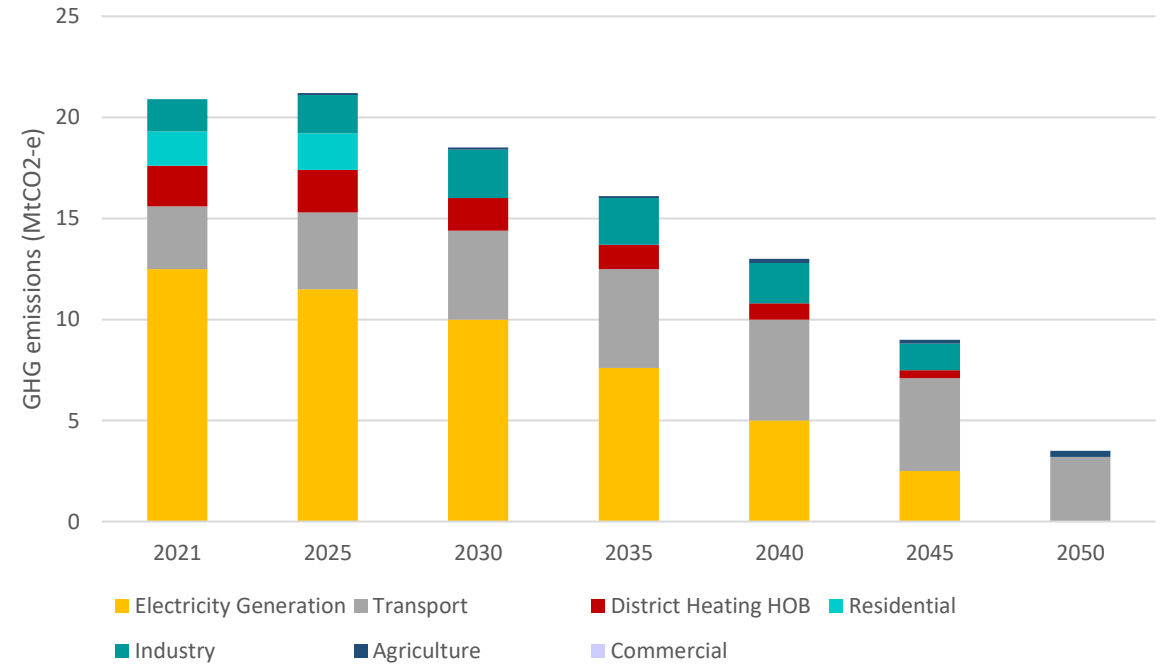


Ambitious scenarios

Sustainable Heating Scenario



The towards net zero (TNZ) scenario



What we learn from SDG7 road map

- Promote electric cook stoves to provide a sustainable solution to achieving universal access with multifold benefits
- Adopt multi-sectoral approach to raise energy efficiency strategies by 2030 to align with global improvement target
- Fuel switching strategies, including electrification, accelerate SDG 7 progress and provide multi-fold benefits in the long run
- Decarbonize the power and heating sector by investing in renewable energy to help achieve net zero emissions target
- Develop green financing policy

Thank you

