



PARIS2015  
UN CLIMATE CHANGE CONFERENCE  
COP21·CMP11

# ACCELERATING ENERGY TRANSITIONS

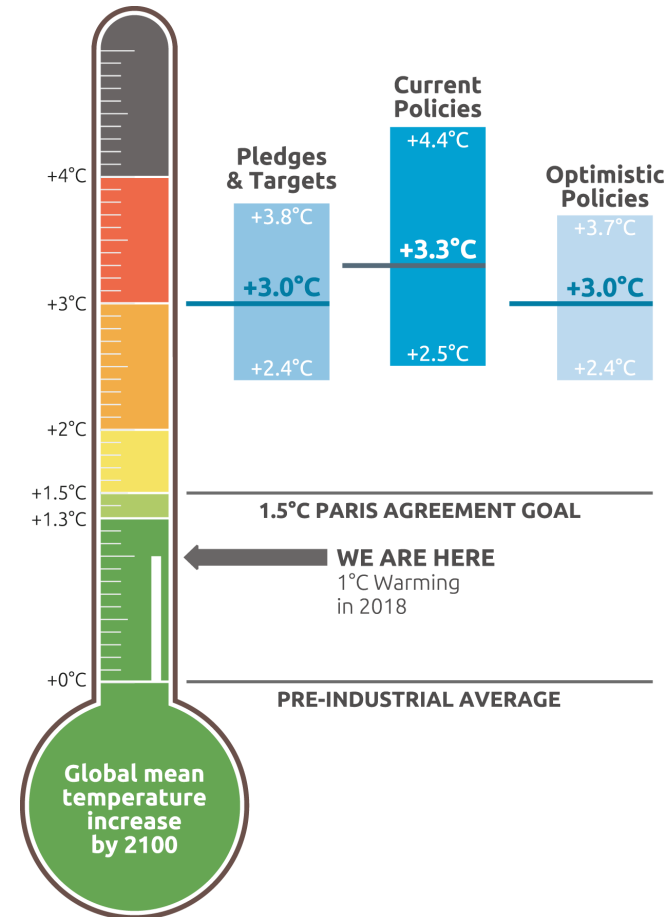
**Project LINK meeting 2019  
Glen Cove, New York, June 2019**

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UN-DESA, NEW YORK ([mukherjee1@un.org](mailto:mukherjee1@un.org))**

# THE ENERGY TRANSITION- CURRENT STATUS

- ‘Leaving on one behind’ – access to modern energy services
  - 650 million without access to electricity by 2030, 90% in SSA.
  - 2.2 billion without access to clean cooking by 2030.
  - Renewables increasing especially in electricity but less so in household heating, and transport.
  - Energy efficiency- slower globally than required.
- Clean, decarbonized energy system
  - Agriculture, forestry and other land use – 24%
  - Energy – the rest (Electricity/heat production – 25%; Industry – 21%; Transport – 14%)

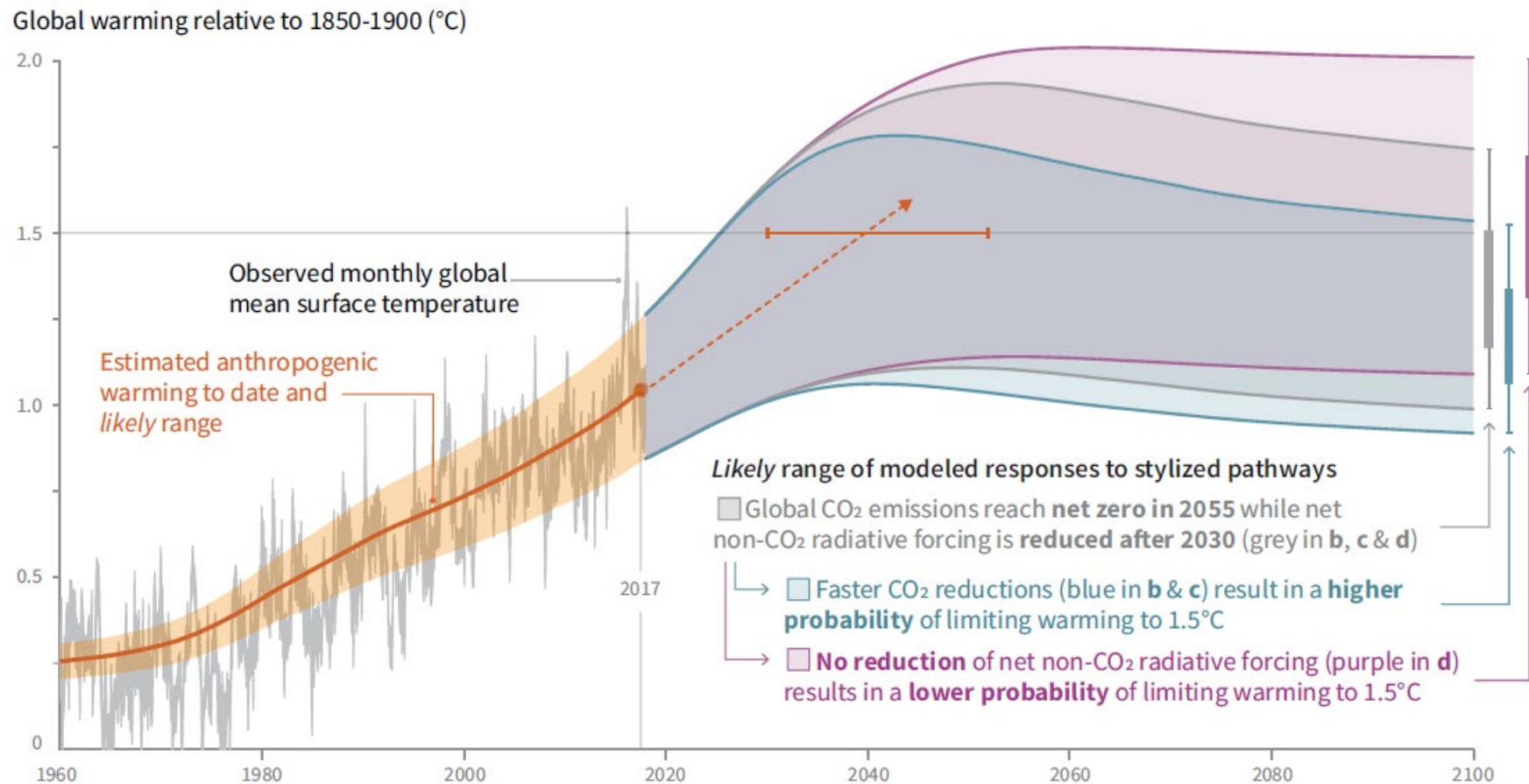
# ASSESSMENT OF CURRENT NDCs



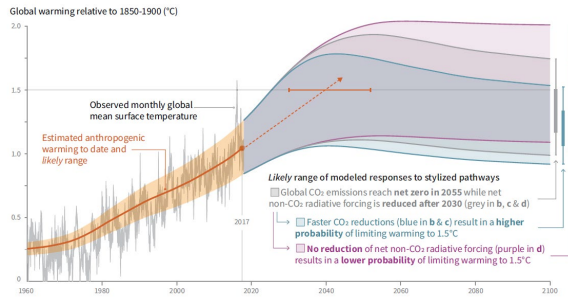
CAT warming projections  
**Global temperature increase by 2100**

December 2018 Update

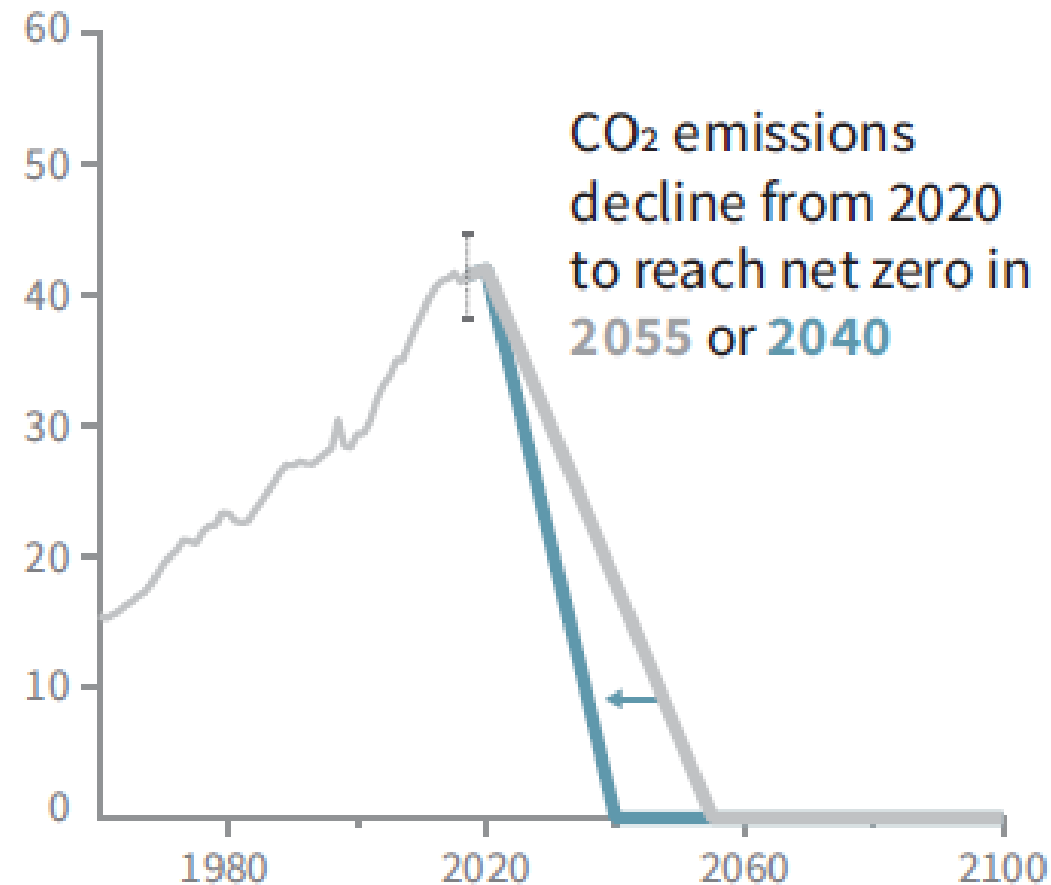
# EXAMPLE: WORKING BACK FROM 1.5°C



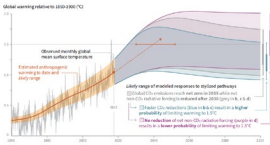
# IMPLIED NET GLOBAL CO<sub>2</sub> EMISSIONS PATHWAY



Billion tonnes CO<sub>2</sub> per year (GtCO<sub>2</sub>/yr)



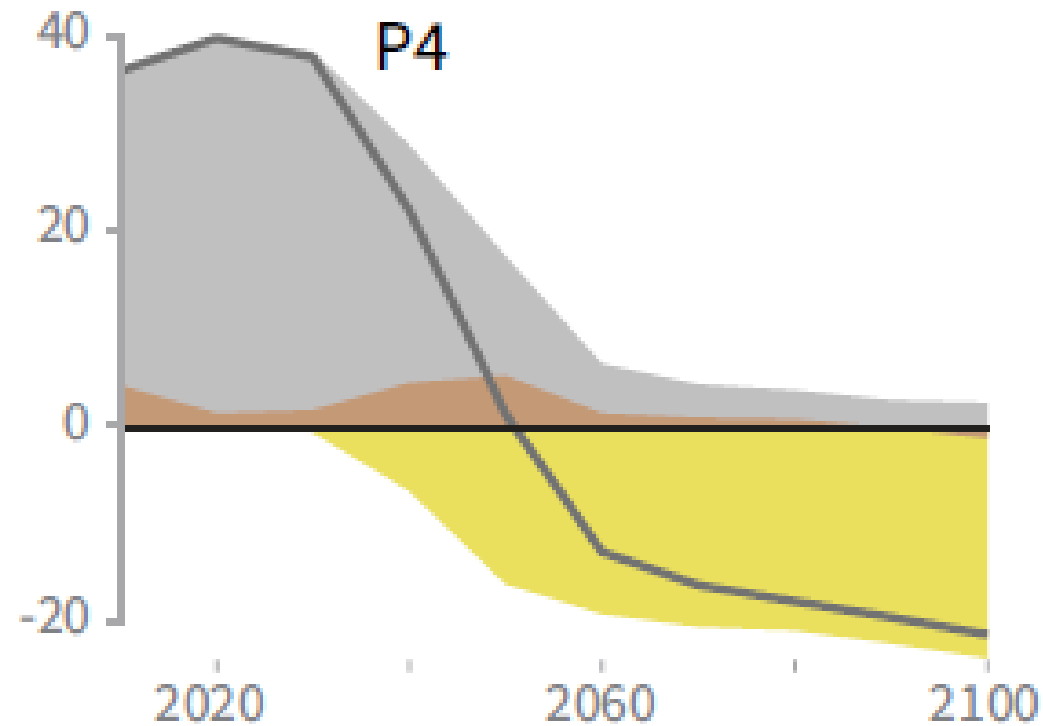
# ALTERNATE SCENARIOS...CLIMATE AND SDG IMPACTS



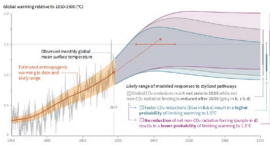
● Fossil fuel and industry ● AFOLU ● BECCS

**‘TRADITIONAL’**

Billion tonnes CO<sub>2</sub> per year (GtCO<sub>2</sub>/yr)



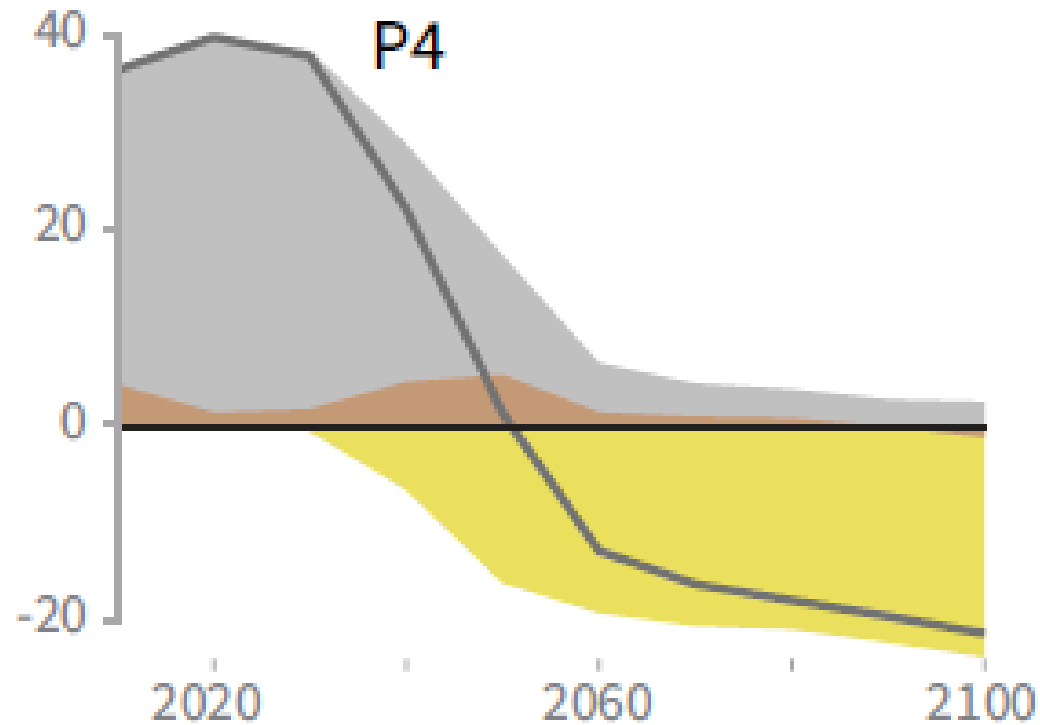
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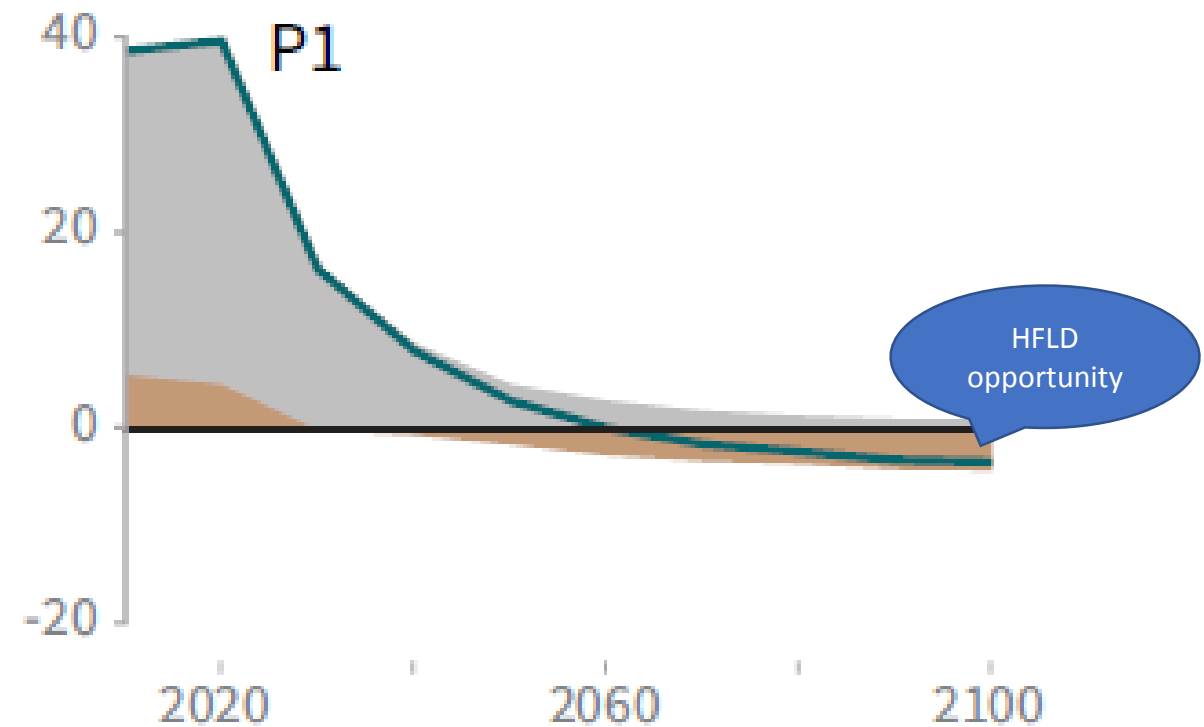
## ‘TRADITIONAL’

Billion tonnes CO<sub>2</sub> per year (GtCO<sub>2</sub>/yr)



## ‘NEXT GENERATION’

Billion tonnes CO<sub>2</sub> per year (GtCO<sub>2</sub>/yr)



# TO THE PANEL...

- Governance
  - Policy instruments, regulation
- Finance and investments
- Science, technology and innovation
- Individual and collective behavior
- International collaboration

*What policies are most urgently needed for accelerating the transition?*

*How can trade-offs be managed?*

*What role do global standards play?*

*How can we best move from models to action?*