

#### Main Findings of the IPCC Special Report on Global Warming of 1.5°C

#### Kuala Lumpur, 26 October 2019



# **Global Warming of 1.5°C**

An IPCC special report on the **impacts of global** warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.





#### Where are we now?

Approximately 1.0°C of global warming since pre-industrial times, human activities have caused.

Already seeing consequences for people, nature and livelihoods



Ashley Cooper / Aurora Photos

# • Every bit of warming matters • • Every year matters • • Every choice matters •





# 1.5°C compared to 2°C?

- Reduce risks in dryland regions and least developed countries
- Lower risks for heat, health, livelihoods, food security, water supply, human security and economic growth

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### 1.5°C compared to 2°C?

- Smaller reductions in yields of maize, rice, wheat and sorghum
- Global population exposed to water stress is up to 50% less, also less water stress for ecosystems
- Up to several hundred million fewer people exposed to climate-related risk and susceptible to poverty by 2050
- Lower impact on biodiversity and species







**Energy system transitions** 

- Decarbonization of electricity
  - o Exiting fossil fuel generation
  - Integration of carbon free renewables into energy systems
- Electrification of energy use in
  - o Vehicles, Industry, Buildings
- Energy efficiency
  - o All sectors
- Adaptation of key infrastructure to climate change



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#### Urban and infrastructure systems transitions

- Adoption of low–carbon transport fuels (e.g. electricity, hydrogen)
- Shifts to public transportation and sharing, non-motorized transport

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- Smart grids
- Efficient appliances
- Low/zero-carbon buildings
- Green infrastructure
- Building codes and standards



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#### Land and ecosystem transitions

- Afforestation and reforestation
- Agroforestry
- Sustainable intensification of agriculture
- Conservation agriculture
- Soil management
- Livestock management
- Ecosystem restoration, biodiversity management
- Wetland management
- Building on indigenous knowledge and local knowledge



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# Industrial system transitions

- Energy efficiency
- Electrification and hydrogen
- Industrial carbon capture, utilization and storage
- Circular economy







#### Within and across systems

- Re-directing financial flows towards low-carbon assets
- Social protection for the poor and vulnerable
- International, regional and local cooperation





# **Sustainability**

Climate mitigation through low energy demand, low material consumption and low carbon food have the highest additional benefits for SDGs.

SDGs can support and enable the systemic transitions and transformation





# **THANK YOU FOR YOUR ATTENTION!**

#### For more information:

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