

KINGDOM OF SAUDI ARABIA

G20 PRESIDENCY – 2020

ENERGY & CLIMATE



OVERALL THEME OF THE SAUDI G20 PRESIDENCY



Key Elements of the 2020 Agenda | Theme and Aims

The Saudi Presidency Theme is supported by three aims

Realizing the opportunities of the 21st Century for all

Empowering People

Create the conditions in which all people, especially women and youth can live, work and thrive: social and economic inclusion; decent, sustainable work



Safeguarding the Planet

Establish a new paradigm for global energy use and climate action: circular carbon economy solutions for research, policy and markets. Further, focus on food security and water management, reforestation and coral reef



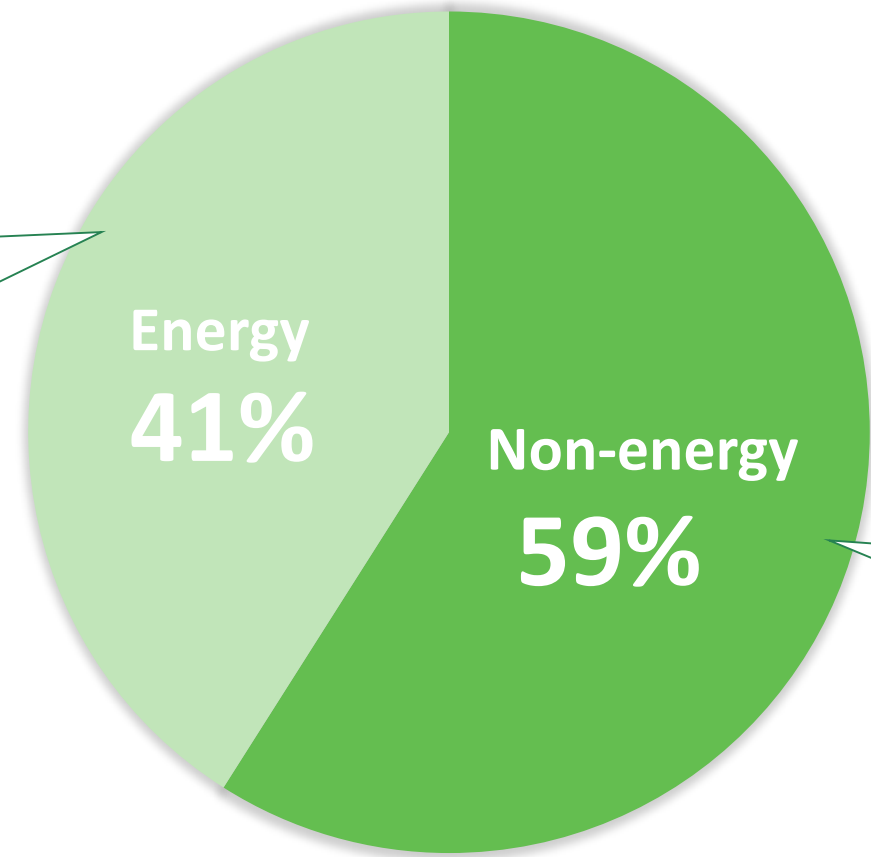
Shaping New Frontiers

Utilize and share the benefits of innovation by: encouraging the utilization of technology in infrastructure, developing smart cities, driving digitalization across the economy and encouraging cooperation in space

TOTAL EMISSIONS



- Cleaner Energy Systems:
- Renewables
 - Energy Efficiency
 - Nuclear power
 - CCU / E2V
 - Bio-energy
 - CCS
 - Direct Air Capture



- All levels:
- Product level
 - Industry level
 - Sector level
 - National level

Non-energy sectors contributed to approximately two-third of global emissions, which can be addressed through the Circular Carbon Economy approach at various level

Source: IEA Global CO2 Emissions by Sector, 2017. The 41% share for Energy includes Electricity & Heat Generation according to the IEA methodology.

THE 4 RS OF THE CIRCULAR CARBON ECONOMY (CCE) APPROACH

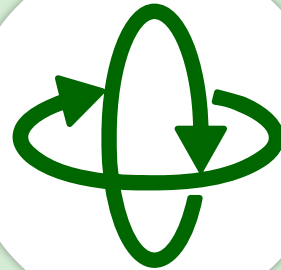
REDUCE



Reduce the amount of carbon entering the system

- Renewables
- Energy efficiency
- Nuclear power

REUSE



Convert carbon to another useful industrial feedstock

- Carbon Capture and Utilization (CCU) / Emissions to Value (E2V)

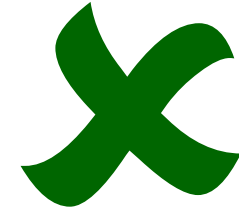
RECYCLE



Recycle carbon through natural processes, decomposition and combustion

- Bio-energy
- Hydrogen

REMOVE



Remove carbon from the system

- Carbon Capture and Storage (CCS)
- Direct Air Capture

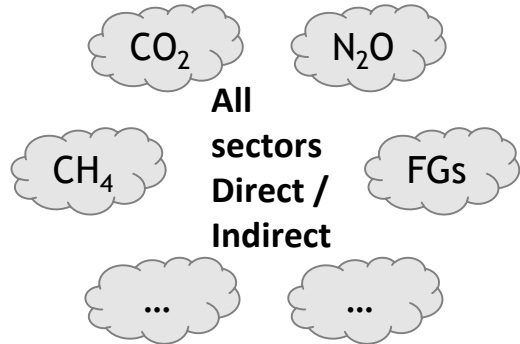
MANAGING GHG EMISSIONS THROUGH THE CCE

Reduce

Reduce the amount of emissions entering the system



- Demand
- Resources
- Efficiency



Recycle

Recycle emissions through natural decomposition and combustion



- Fuels

THE **4 Rs**
OF THE CIRCULAR
CARBON ECONOMY



- CH₄ to PetChem
- CO₂ to products

Reuse

Convert emissions to another useful industrial feedstock

- Natural sinks



Remove

Remove emissions from the system

THANK YOU

