

# NET-ZERO JOURNEY IN MOROCCO

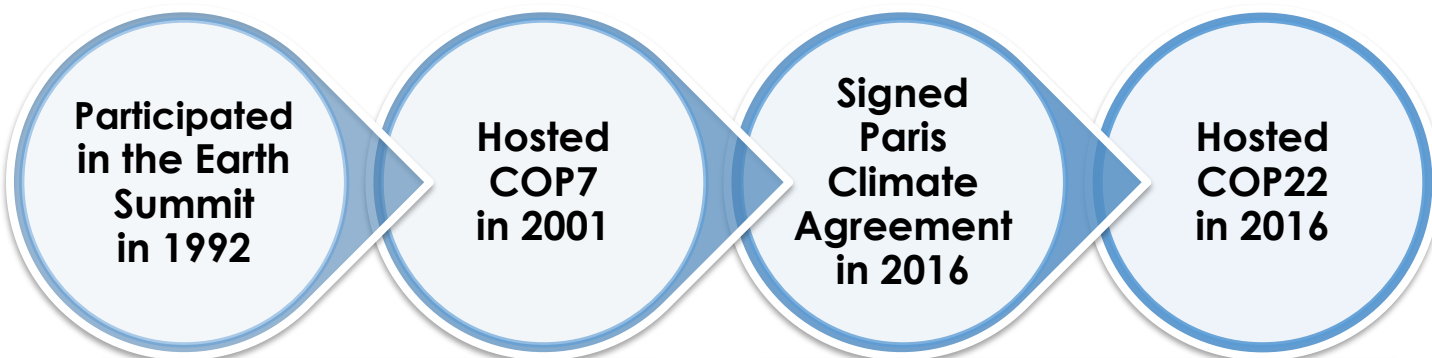
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UNIVERSITY OF GLASGOW - THE COP26 CHALLENGE



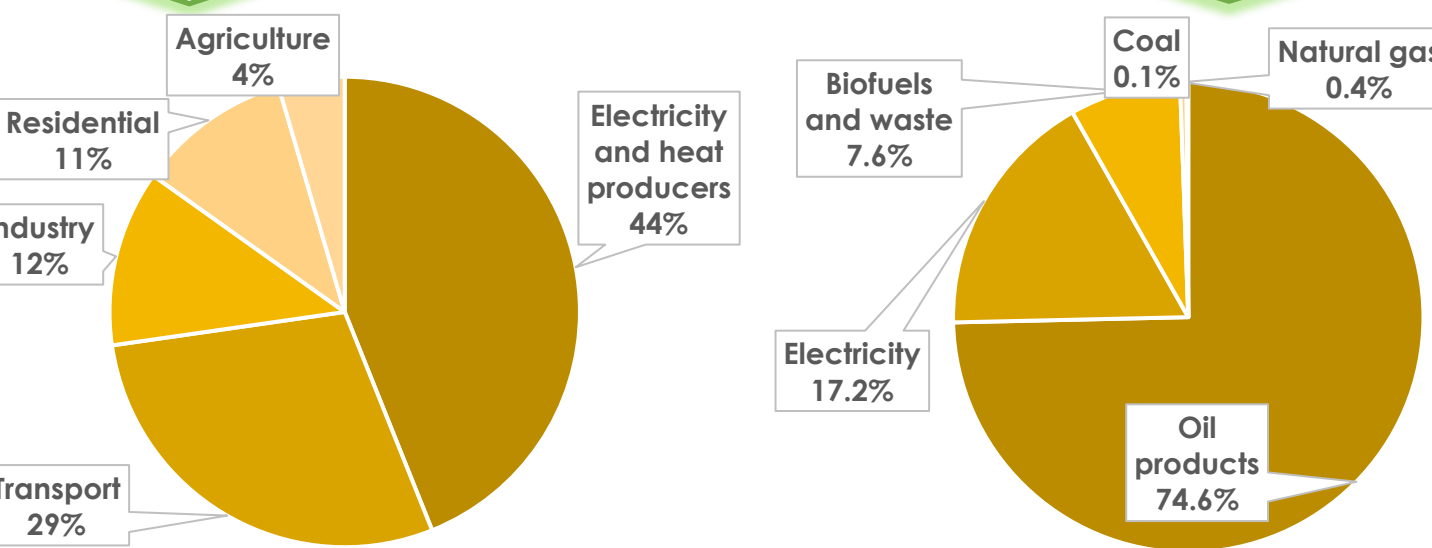
## BACKGROUND

Morocco's global engagement in tackling CLIMATE CHANGE



Electricity and heat followed by transport, industry and residential sectors are responsible for most emissions

Electricity accounted only 17% of final energy use in 2018. Transport, industry, heating are totally powered by fossil fuels



Source of carbon emissions, 2019

Final energy use by source, 2019

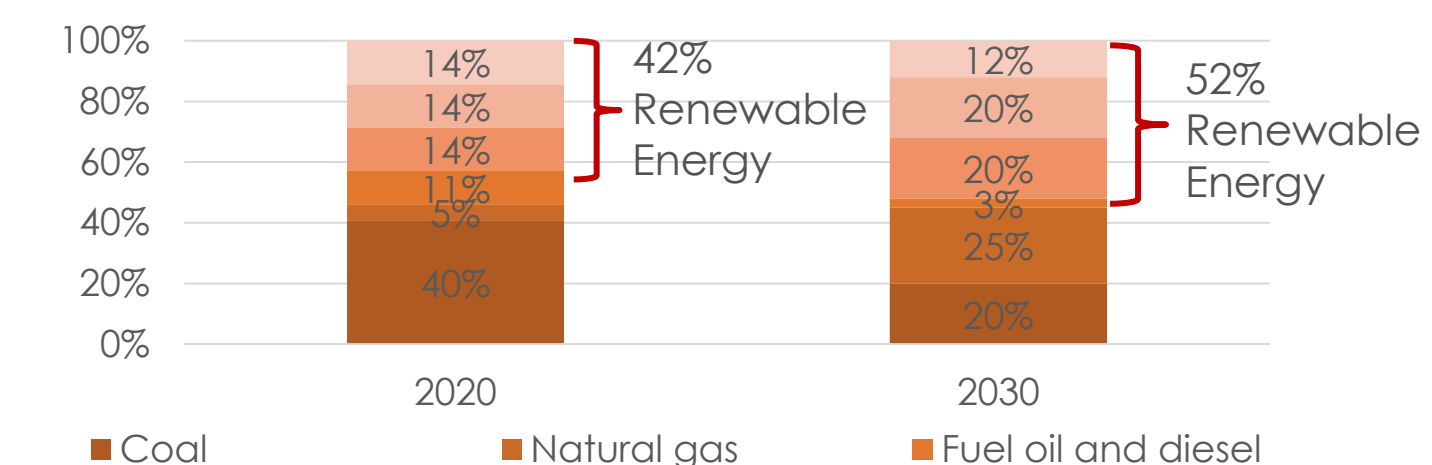
**Morocco's goal**

Meet Paris Agreement targets: "The international treaty on climate change"

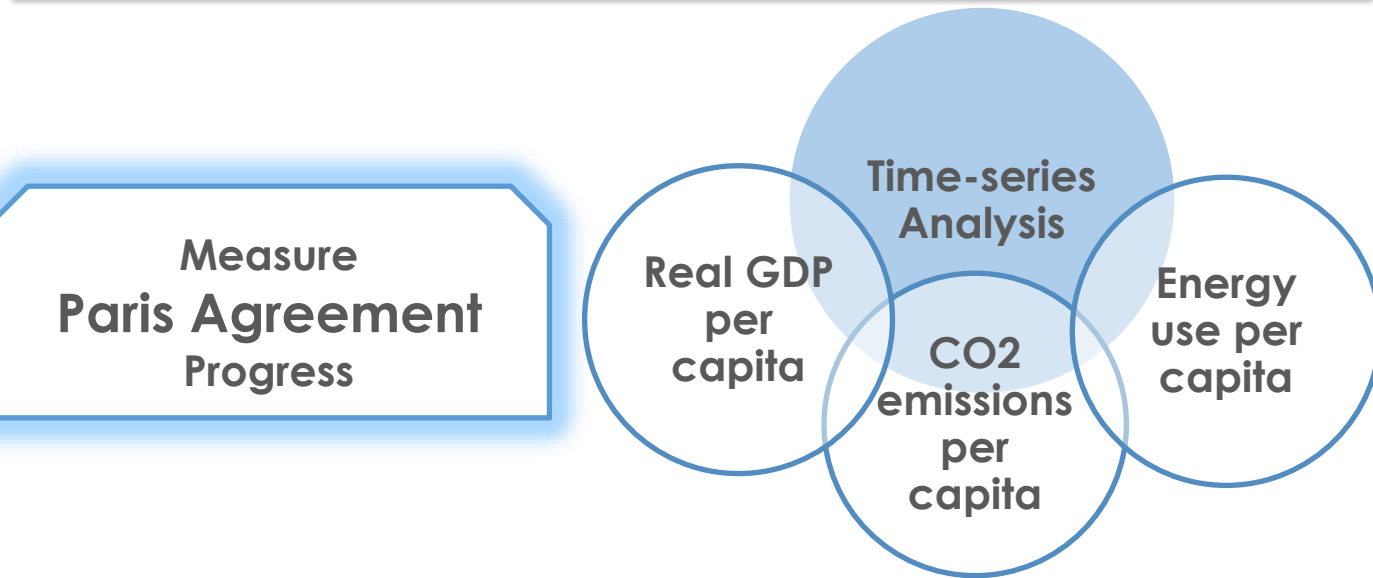
- Limit global warming to 1.5°C above pre-industrial levels
- Net-Zero Economy by 2050: Increase economic growth while reducing emissions

Reaching net zero requires a balance of carbon emission reductions and more carbon sinks such as forests

Morocco's Net-Zero Model:  
Energy Strategy targets for renewable electricity:



## OBJECTIVE 1 AND METHODOLOGY



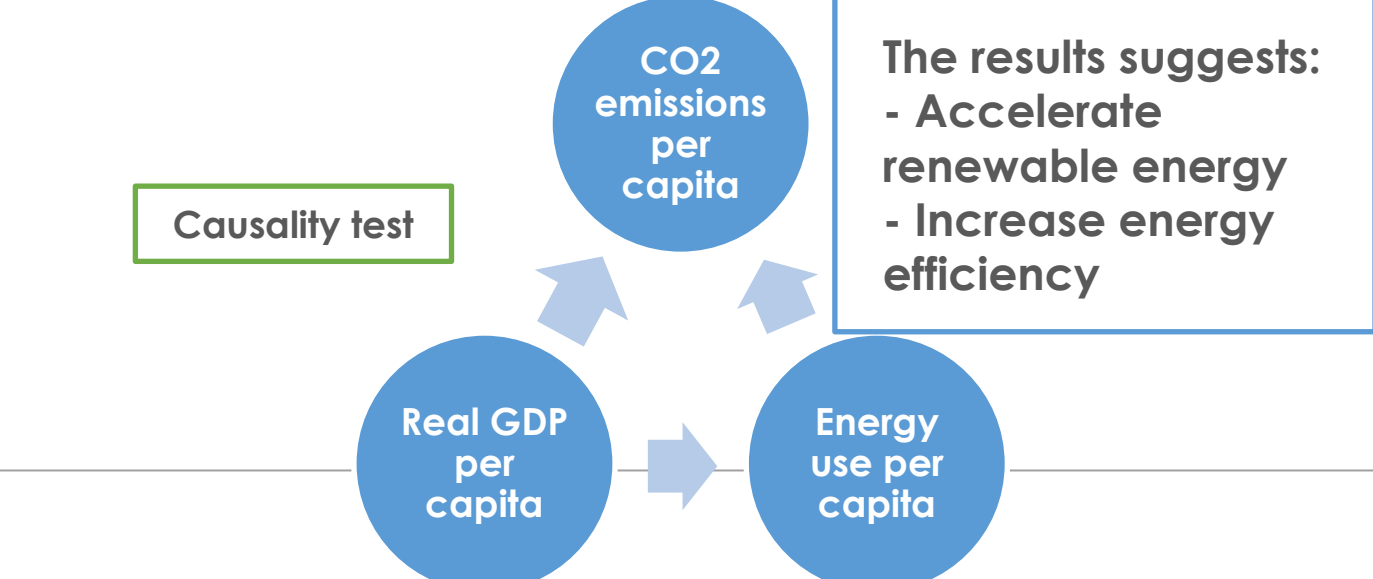
## RESULTS 1: PARIS AGREEMENT PROGRESS

- 1 Long-run relationship between CO2 emissions, GDP growth, and energy use
- 2 Economic growth has become greener since 1992 when Morocco began to separate its economic growth from emissions when real GDP per capita reached \$1795. However, this has been insufficient to reduce the emissions, but only able to slow down the growth in emissions

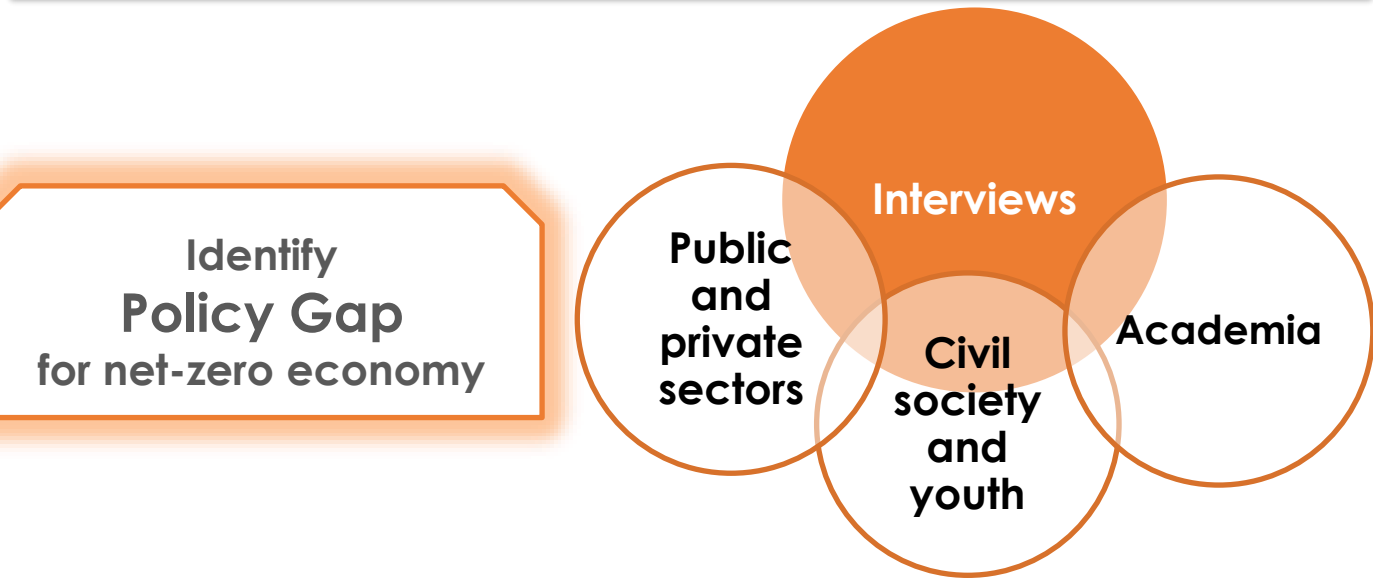
Economic growth increased CO2 emissions but, after a sustained period of growth, further increases in economic growth reduce CO2 emissions



- 3 Carbon emissions could be reduced despite the increase in economic growth and energy use

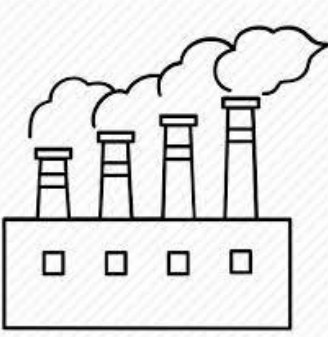


## OBJECTIVE 2 AND METHODOLOGY

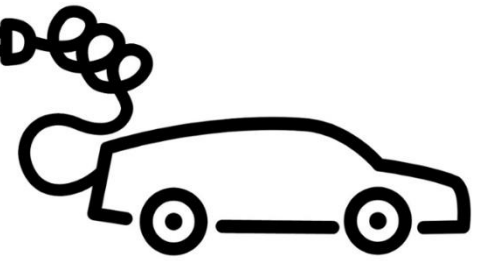


## RESULTS 2: POLICY GAP

- 1 The energy strategy is only aimed at reducing half of emissions from electricity by 2030, ignoring decarbonisations of energy-intensive sectors and emission reductions from polluting industries such as phosphate and cement



- 2 No real efforts to plant trees nor increase electrification of the economy through promoting electric vehicles and electric heating for instance



- 3 Renewable energy projects ignore offshore wind and hydrogen despite its significant potential

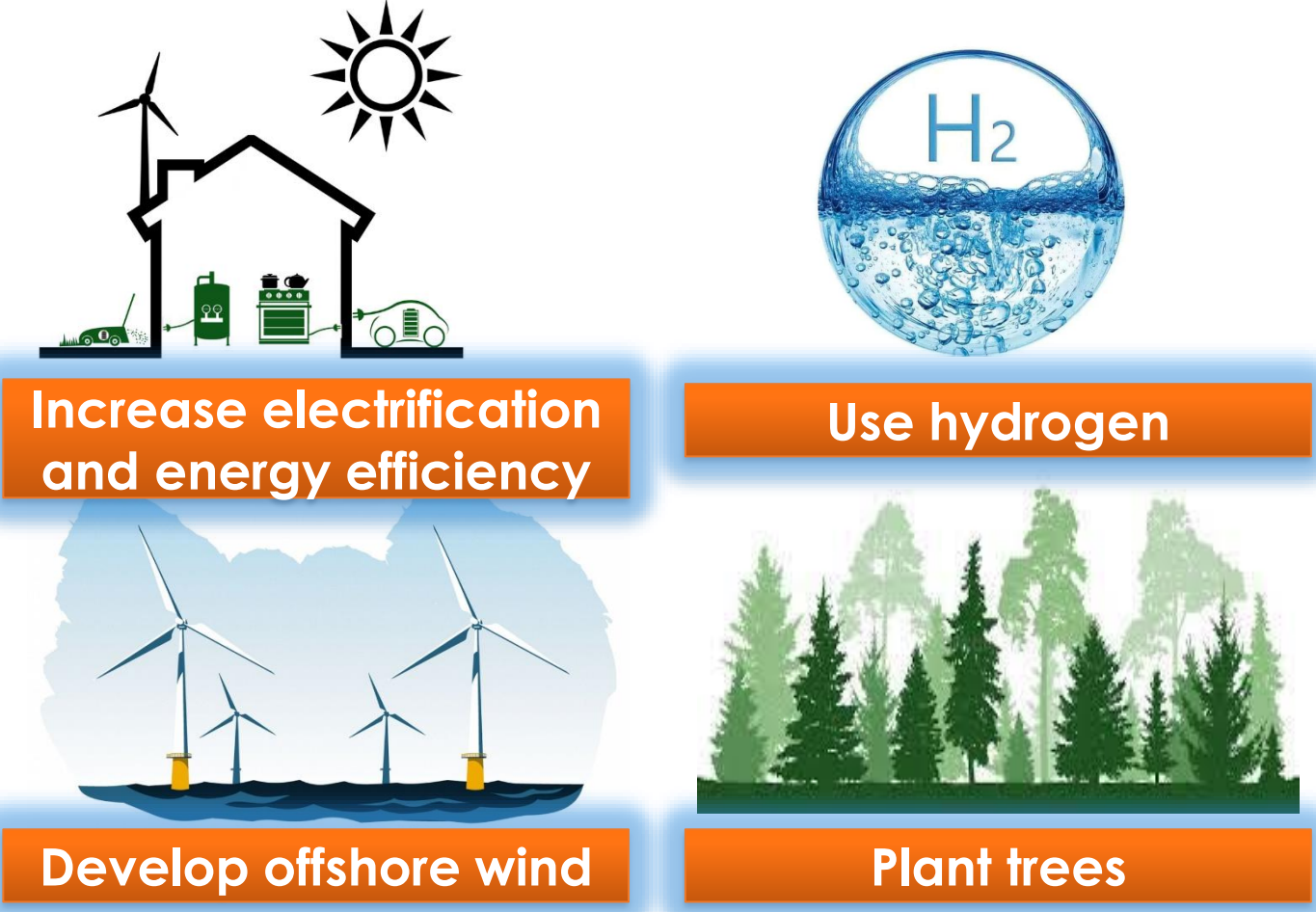
## CONCLUSION

Although Morocco's economic growth has become greener  
This is not enough according to Paris Agreement

Morocco is far from meeting Paris Agreement targets

Major Policy Gap in electrification of economy, use of hydrogen and offshore wind and tree planting

## RECOMMENDATIONS



Increase electrification and energy efficiency

Use hydrogen

Develop offshore wind

Plant trees

## REFERENCES

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