

THE POLICY BEHIND CLIMATE CHANGE IN IRELAND

Irish Landscape Institute *Grow your Mind* webinar

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Overview

- Climate change: the essentials
- Ireland's climate action context
- Recent developments and future pathways



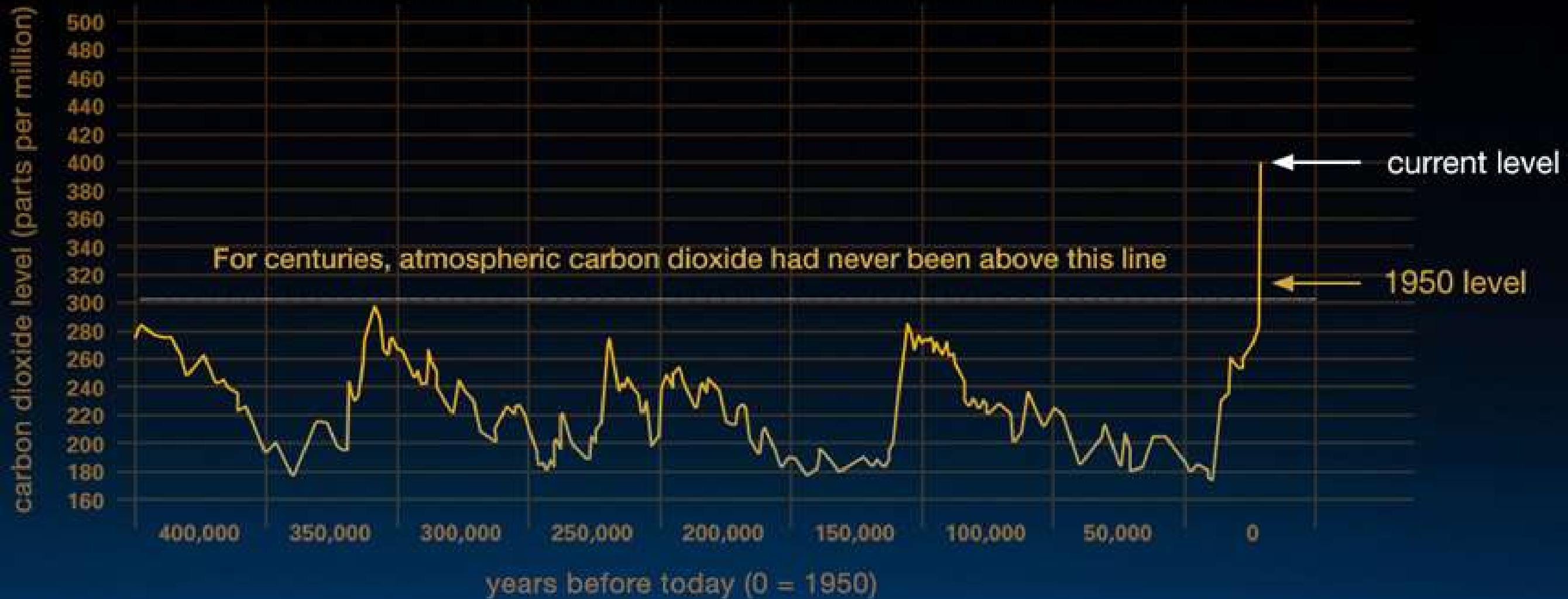
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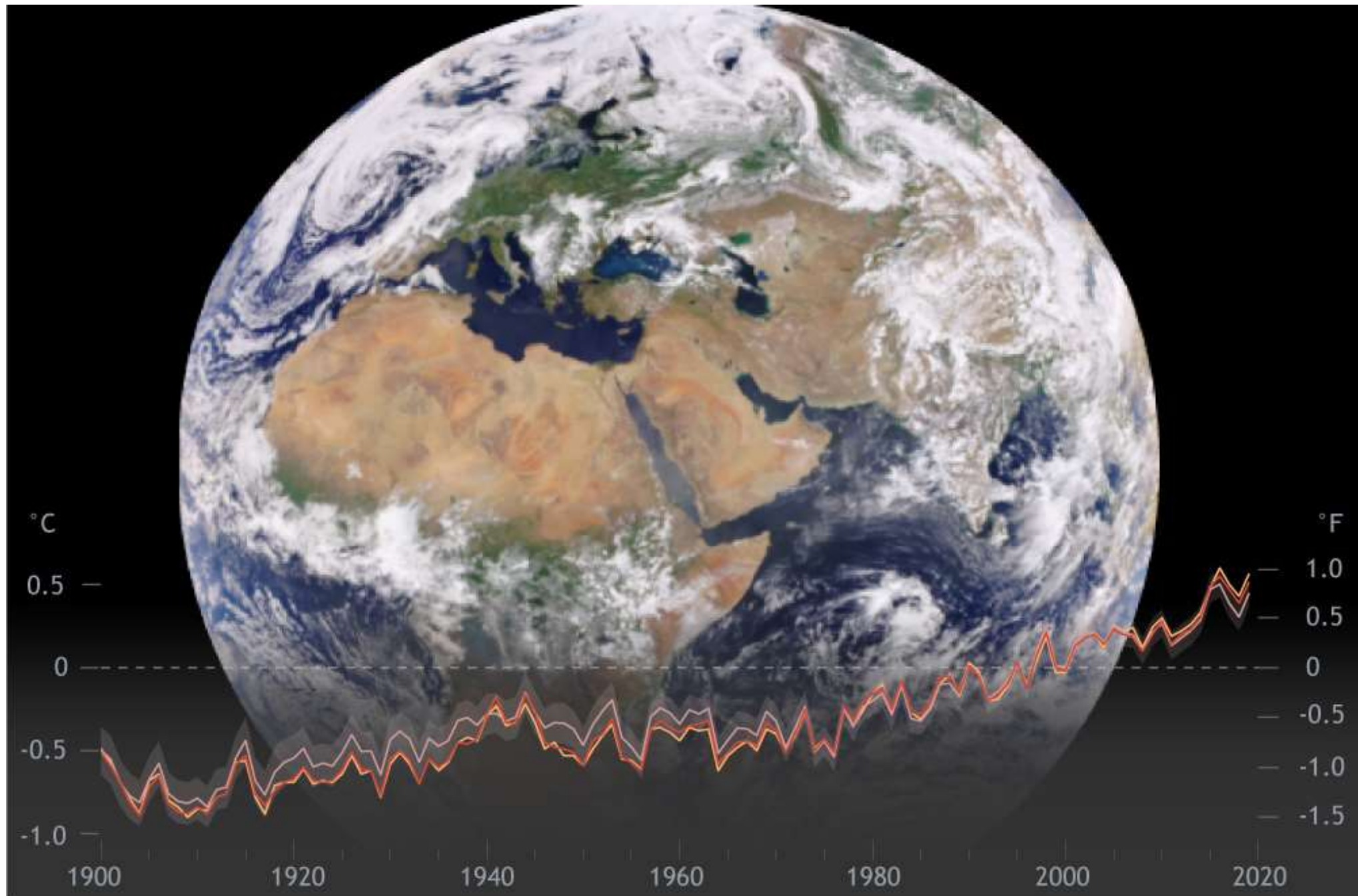
Climate change: The Essentials



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CO₂ levels are higher than at any time in the past 400,000 years





NOAA DISCOVER/EPIC
June 24, 2019

— NOAA

— Univ. East Anglia (HadCRUT4)

— NASA

NOAA Climate.gov
Data: SOTC 2019

Source: [Climate.gov](https://climate.gov)

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.



Available at:
<https://www.ipcc.ch/sr15/>



CLIMATE RISKS: 1.5°C VS 2°C GLOBAL WARMING



EXTREME WEATHER

100% increase in flood risk. vs **170%** increase in flood risk.

SPECIES

6% of insects, **8%** of plants and **4%** of vertebrates will be affected. vs **18%** of insects, **16%** of plants and **8%** of vertebrates will be affected.

WATER AVAILABILITY

350 million urban residents exposed to severe drought by 2100. vs **410 million** urban residents exposed to severe drought by 2100.

ARCTIC SEA ICE

Ice-free summers in the Arctic at least once **every 100 years.** vs Ice-free summers in the Arctic at least once **every 10 years.**

PEOPLE

9% of the world's population (700 million people) will be exposed to extreme heat waves at least once every 20 years. vs **28%** of the world's population (2 billion people) will be exposed to extreme heat waves at least once every 20 years.

SEA-LEVEL RISE

46 million people impacted by sea-level rise of 48cm by 2100. vs **49 million people** impacted by sea-level rise of 56cm by 2100.

OCEANS

Lower risks to marine biodiversity, ecosystems and their ecological functions and services at 1.5°C compared to 2°C.

CORAL BLEACHING

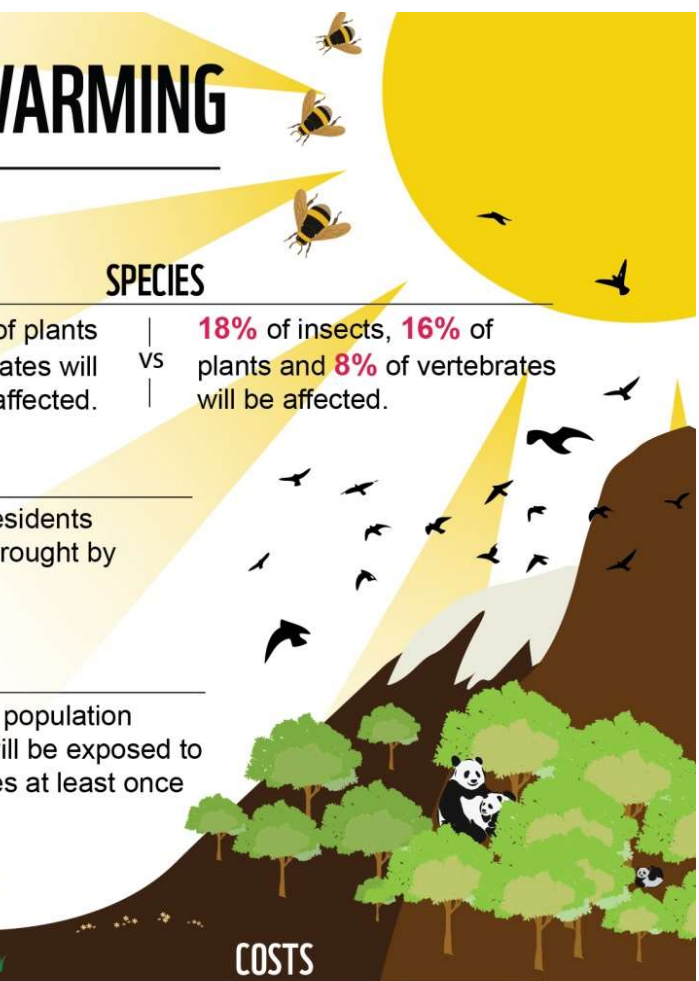
70% of world's coral reefs are lost by 2100. vs **Virtually all coral reefs are lost** by 2100.

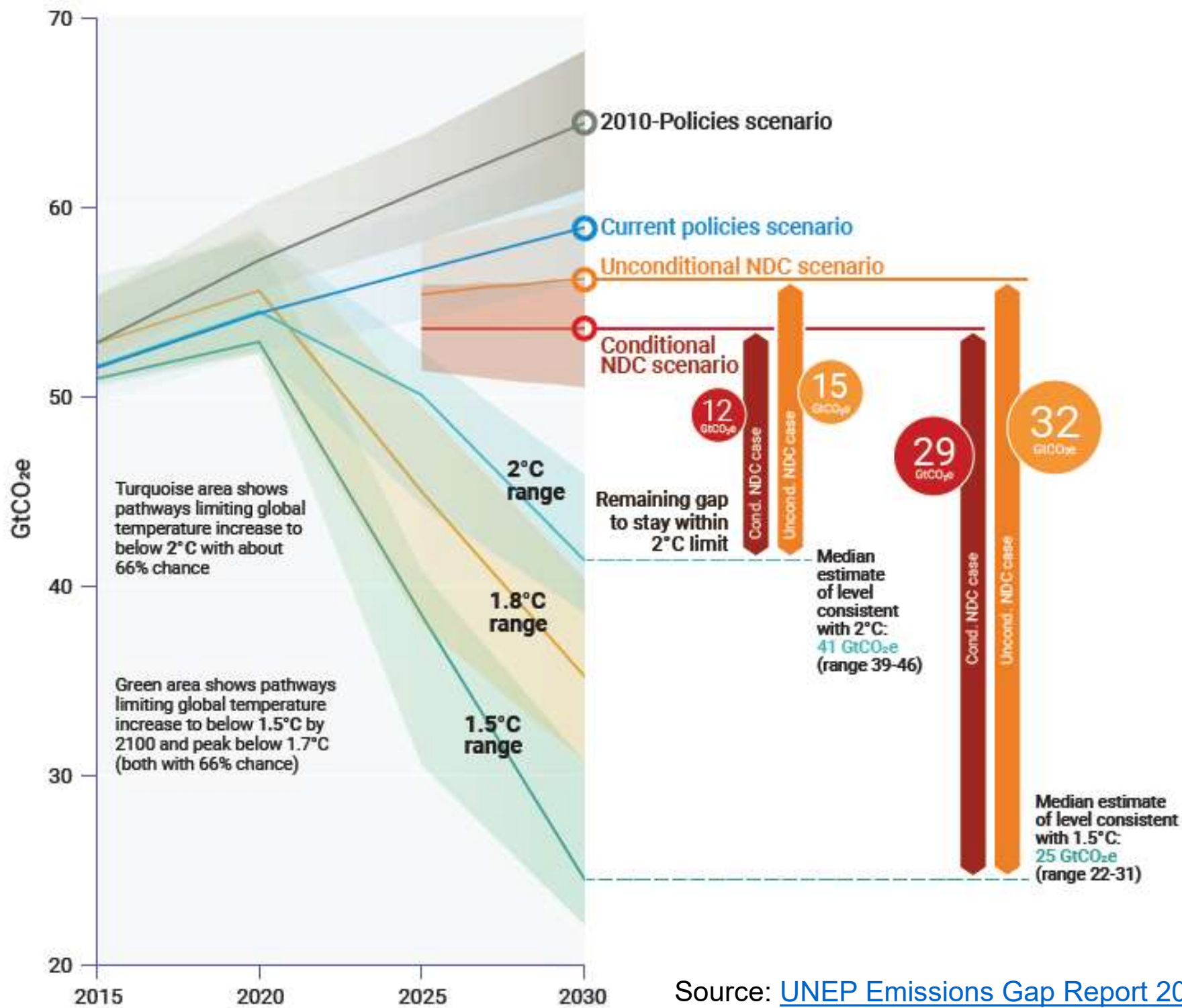
COSTS

Lower economic growth at 2°C than at 1.5°C for many countries, particularly low-income countries.

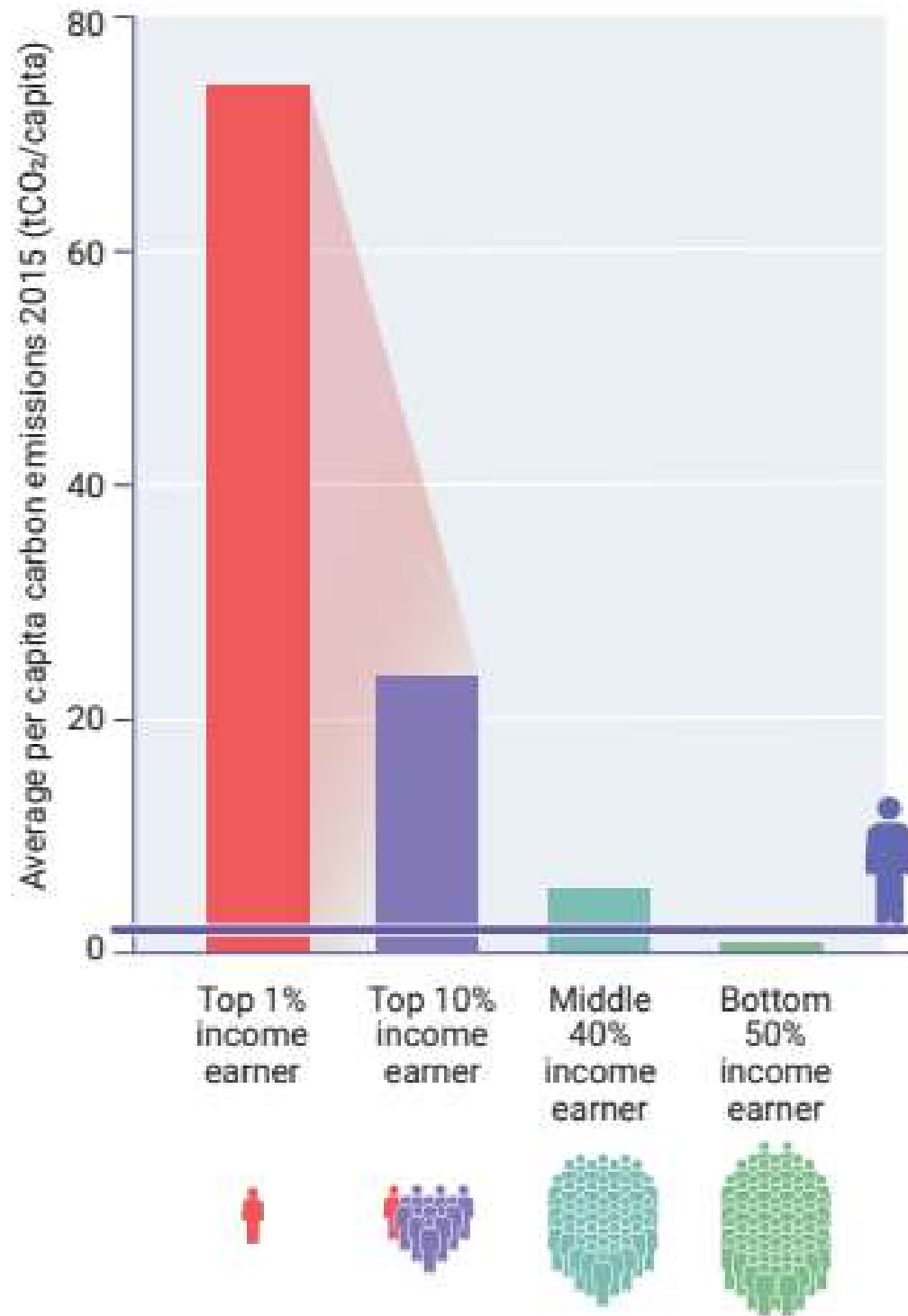
FOOD

Every half degree warming will consistently lead to lower yields and lower nutritional content in tropical regions.

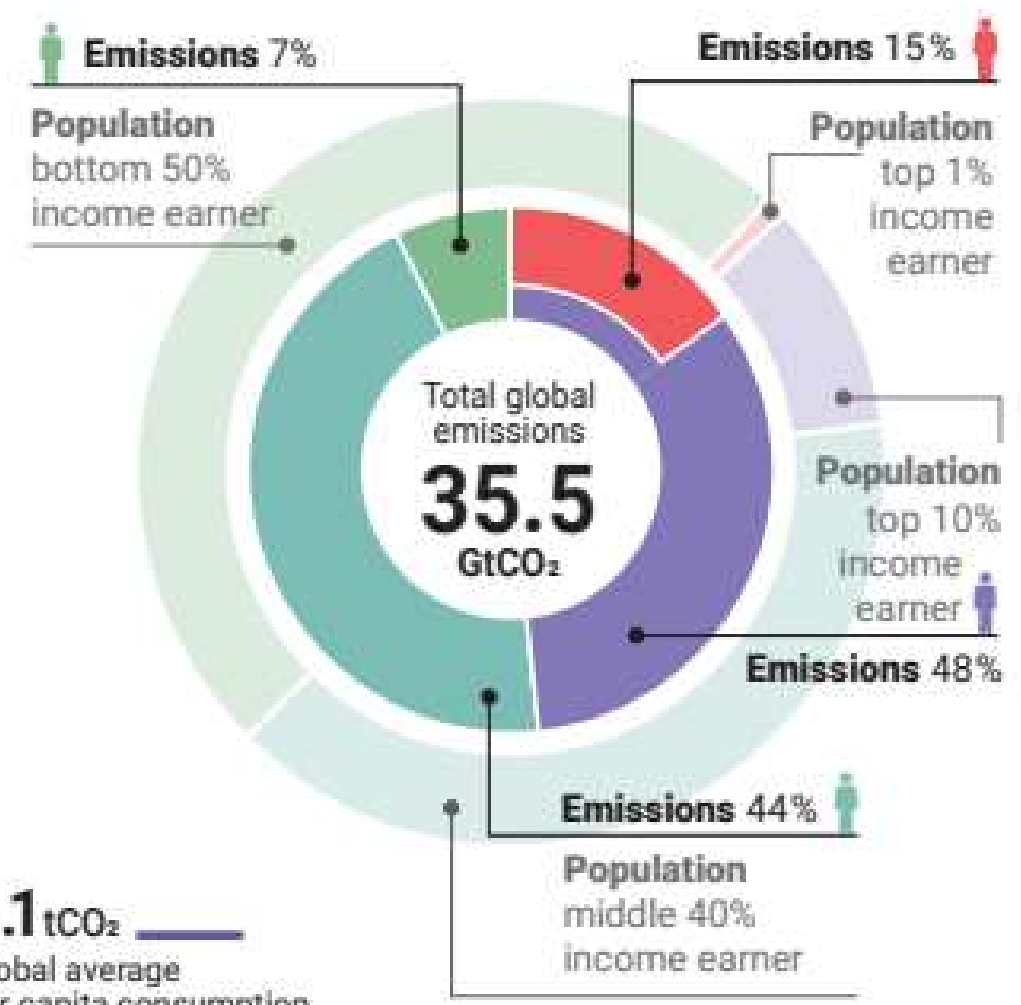




Source: [UNEP Emissions Gap Report 2020](#)



Total carbon emissions per group 2015 (GtCO₂)



Source: [UNEP Emissions Gap Report 2020](#)

Ireland's climate action context



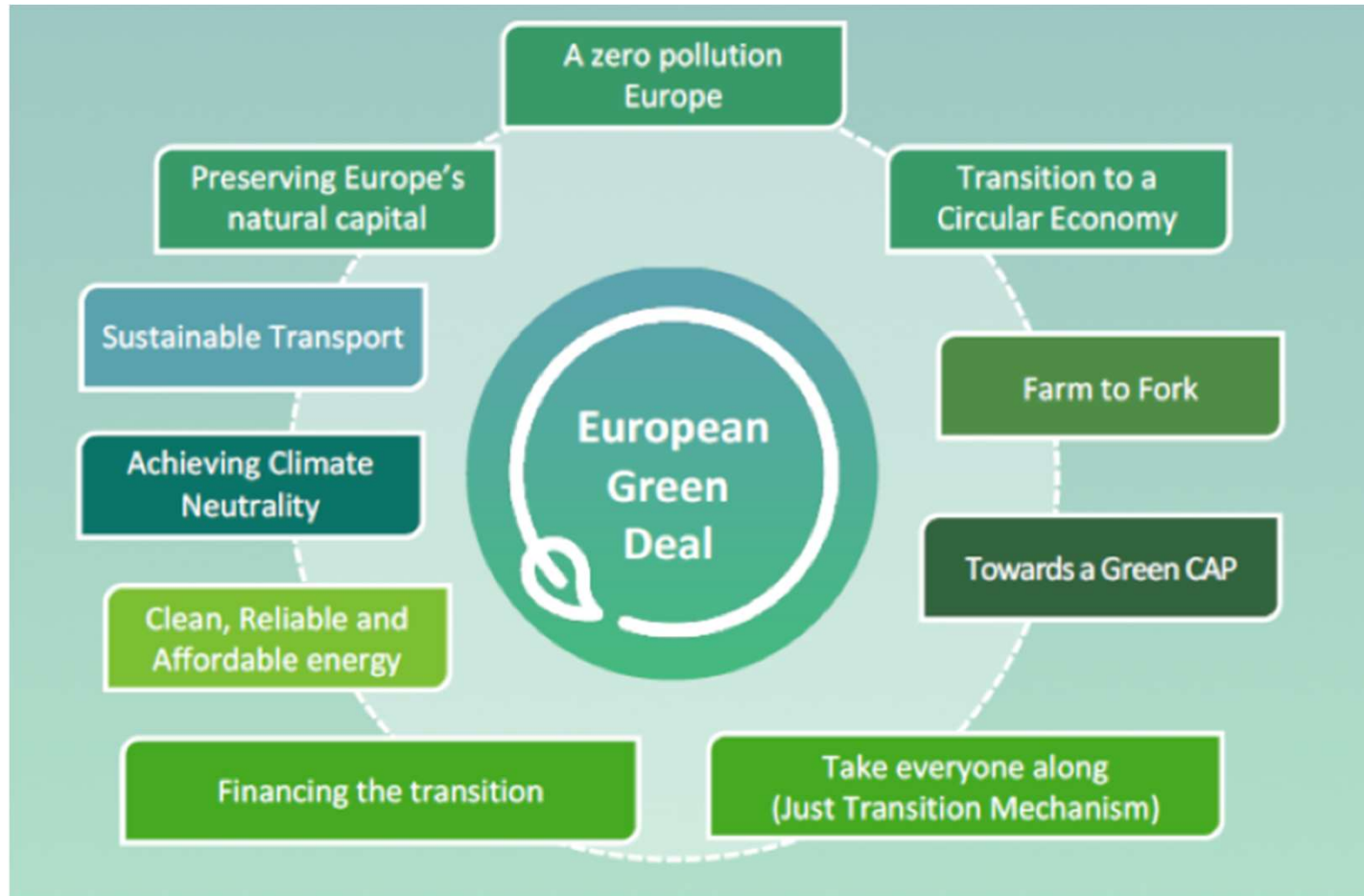
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The global context



Paris Agreement aims to limit “the increase in the global average temperature to **well below 2°C** above pre-industrial levels and pursuing efforts to limit the temperature increase to **1.5°C above pre-industrial levels**”

The European context



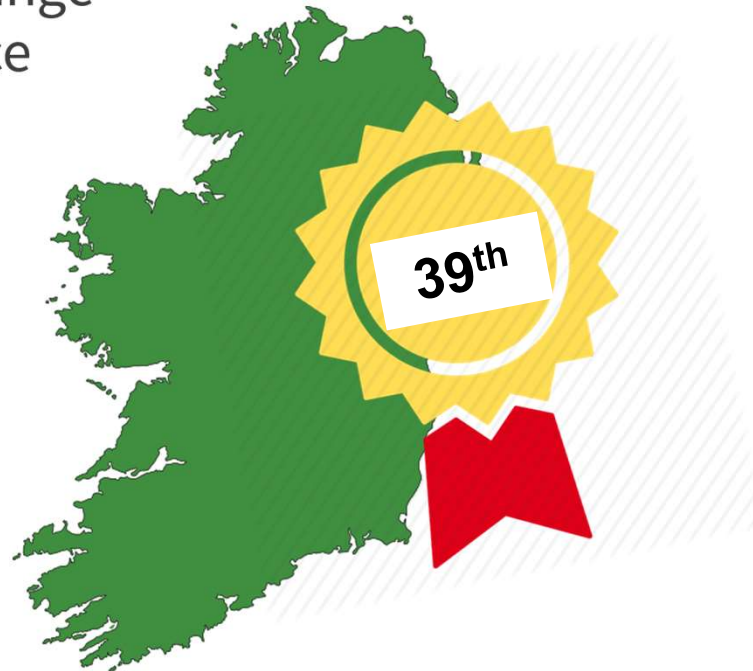
Headline EU targets:

- Net zero GHG emissions by 2050
- 55% reduction relative to 1990 levels by 2030

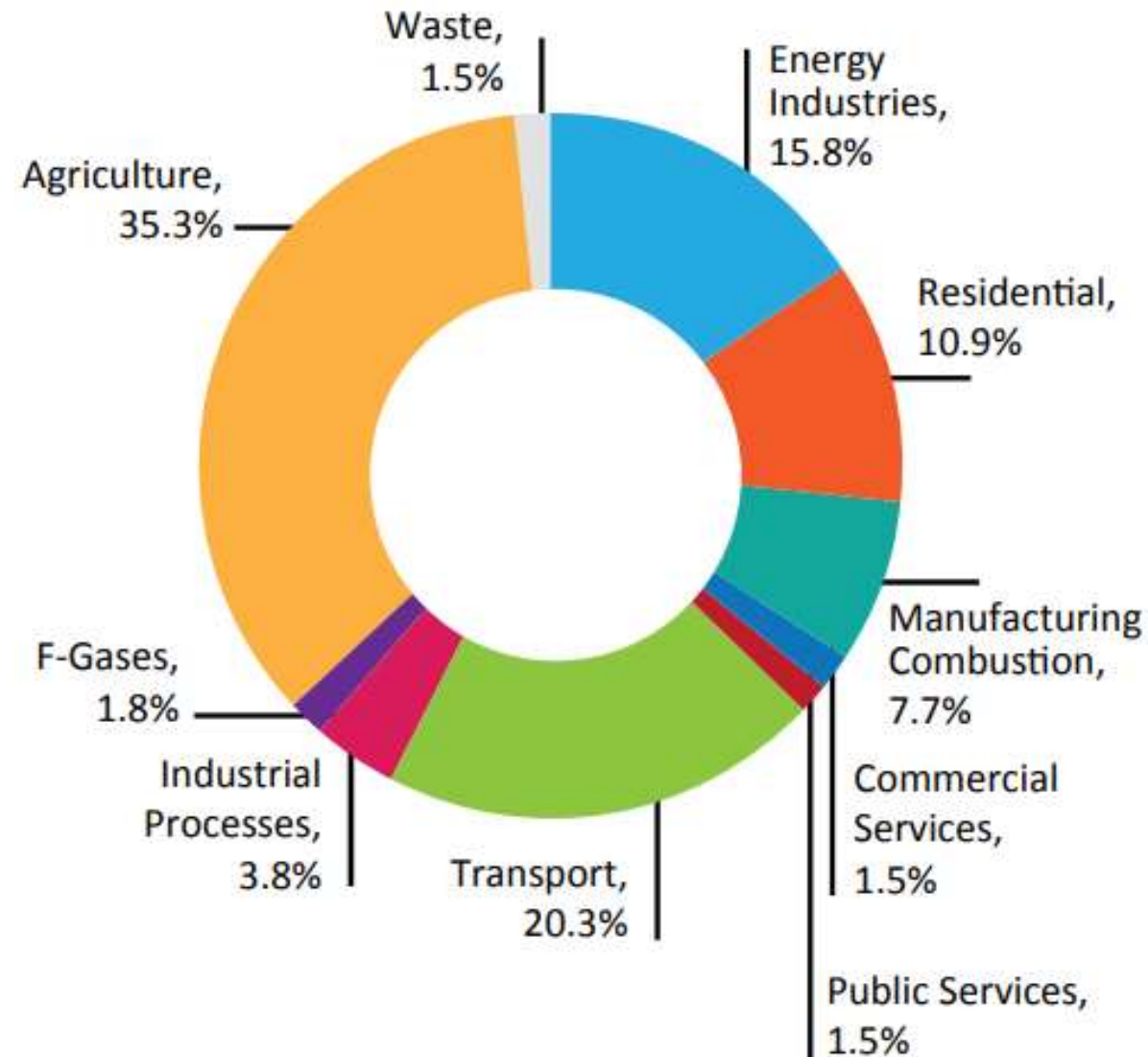
Ireland's climate change profile



Climate Change
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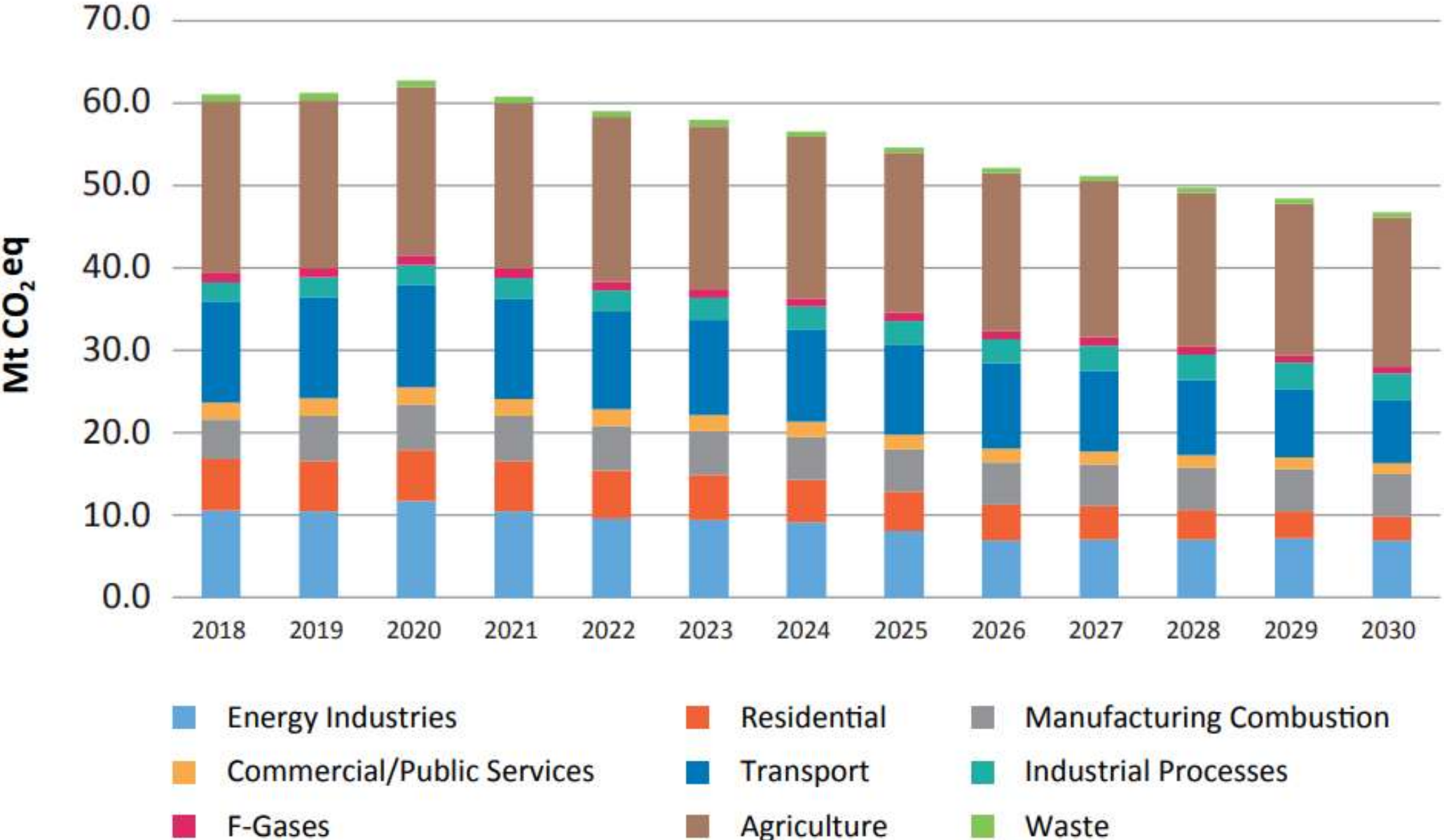


Agriculture is an unusually high share of Ireland's GHG profile



Source: [EPA 2020](#); data for 2019 (provisional)

Where are we headed?



Source: [EPA 2020](#)

Recent developments and future pathways



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From laggard to leader?



A decade of action...

- Target of 51% reduction in GHG emissions by 2030 relative to 2018
→ average 7% per year
- Stronger climate legislation
- “Carbon budgets” that will create targets for each sector of the economy



**Programme
for Government**
Our Shared Future

Challenges to overcome

- Scale of transformation not sufficiently understood
- Competing policy agendas
- Just transition and community engagement
- Where does biodiversity fit in?



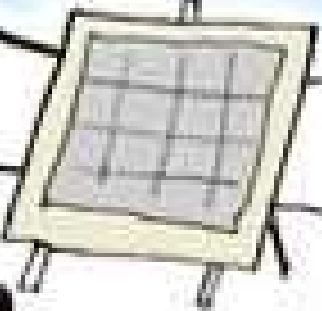
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CLIMATE SUMMIT

WHAT IF IT'S A BIG HOAX AND WE CREATE A BETTER WORLD FOR NOTHING?

- ENERGY INDEPENDENCE
- PRESERVE RAINFORESTS
- SUSTAINABILITY
- GREEN JOBS
- LIVABLE CITIES
- RENEWABLES
- CLEAN WATER, AIR
- HEALTHY CHILDREN
- ETC. ETC.



YAN PETT
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