

Ireland's energy use and the challenge



Paul Kenny, B.E. C. Eng.
Chief Executive
Tipperary Energy Agency



Why we need to change

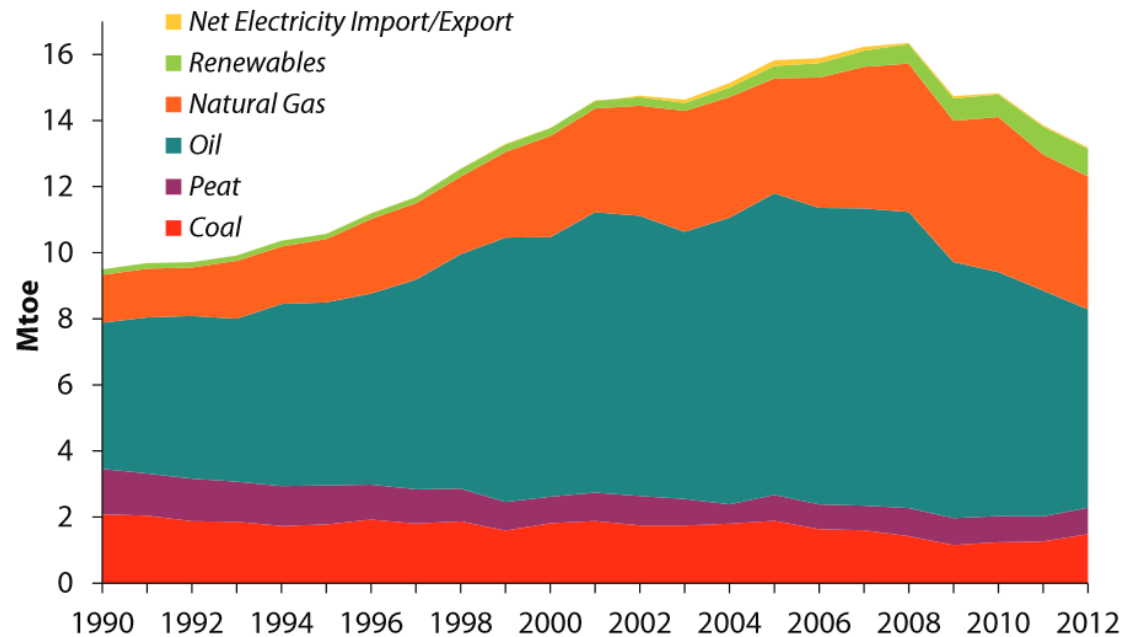


- Climate change reality
- Ireland's energy use
- Energy security
- Competitiveness

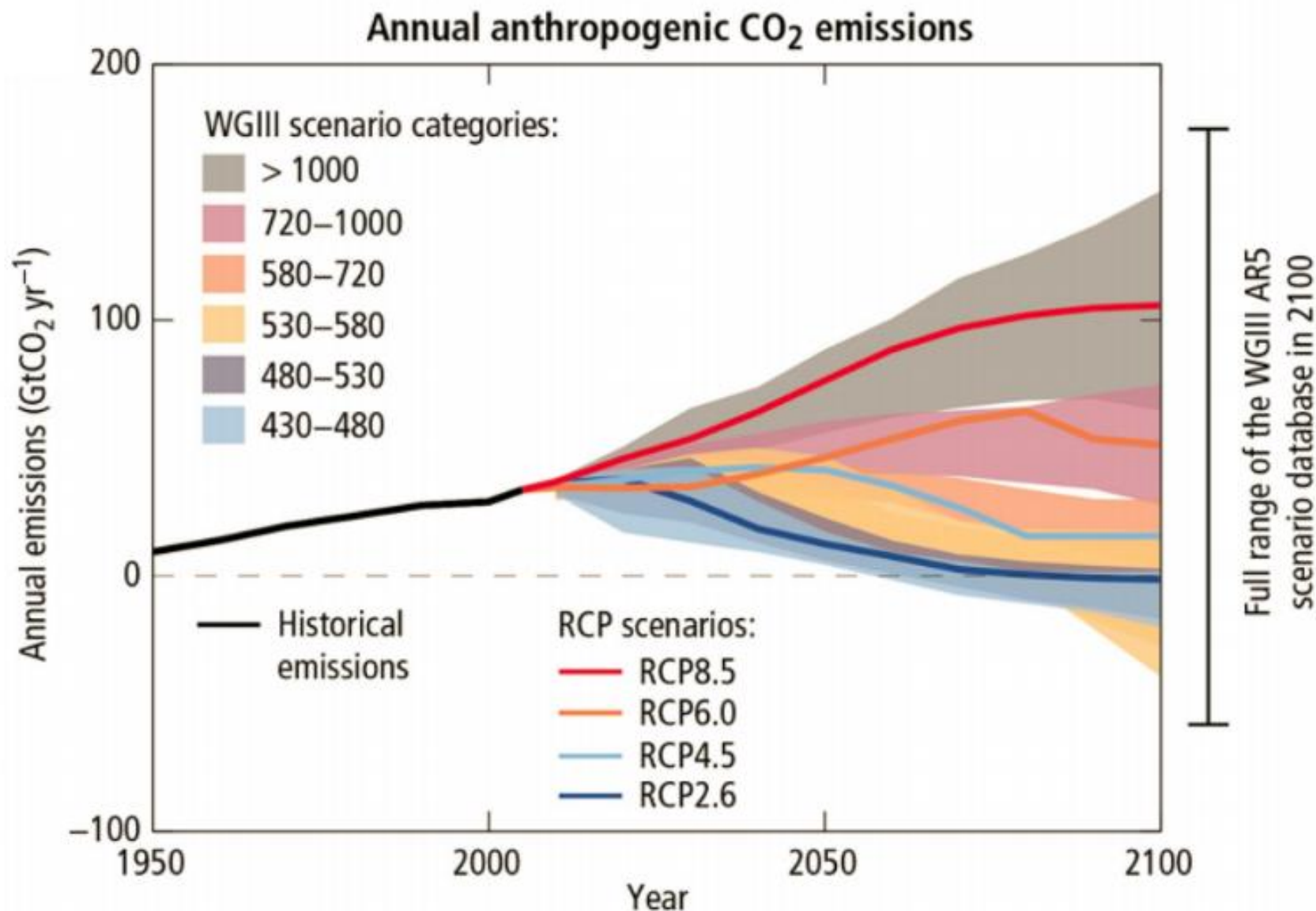




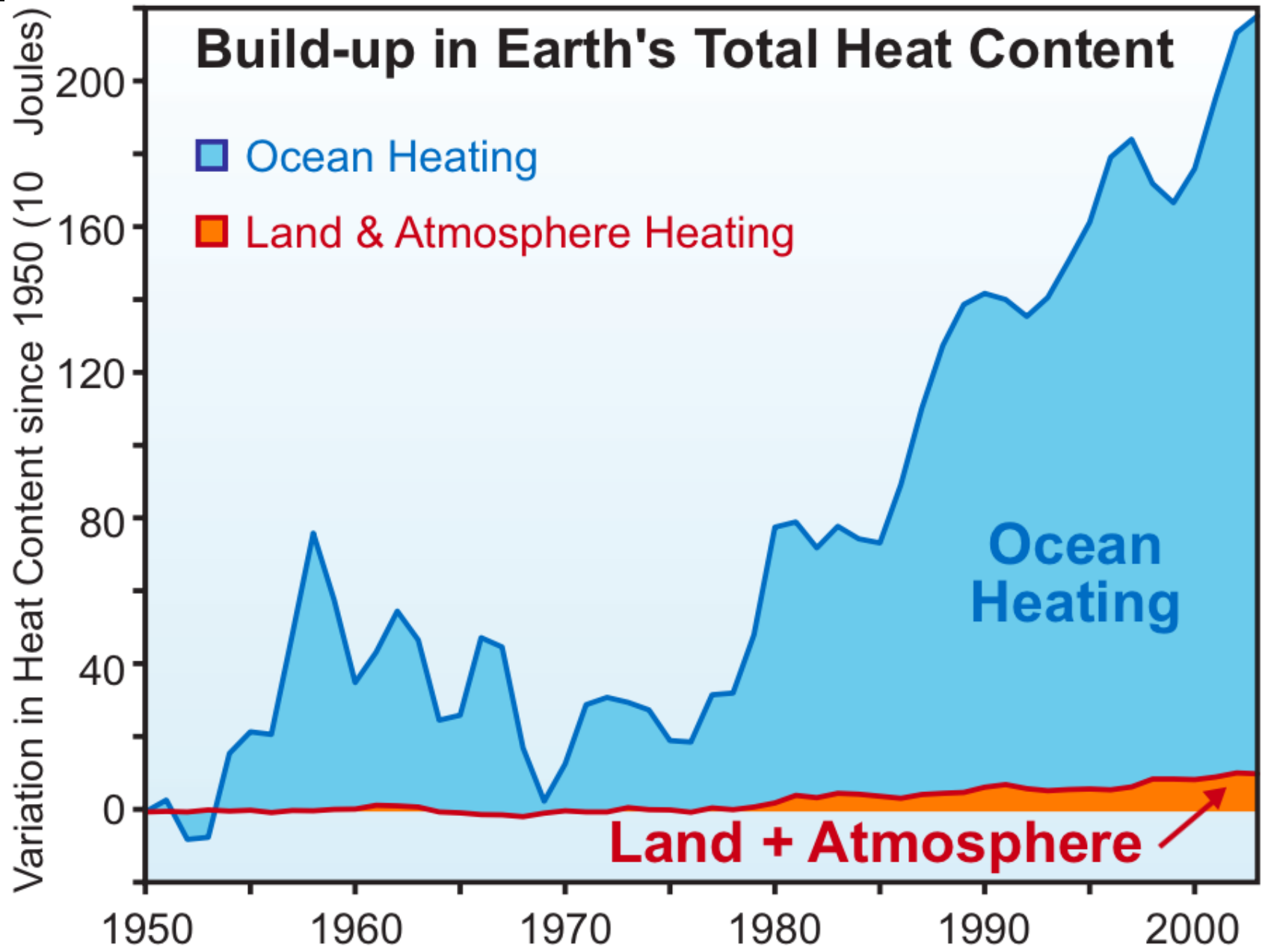
- Dependency on Imports: 84% (ranking EU 24/28)
- % Share of all energy renewables: 7.2% (EU 22/28)
- Carbon intensity of energy 3rd highest.
- i.e. Irish people travel more, use less public transport, live in leakier homes, use more dirtier electricity than most in the world.



Climate Change



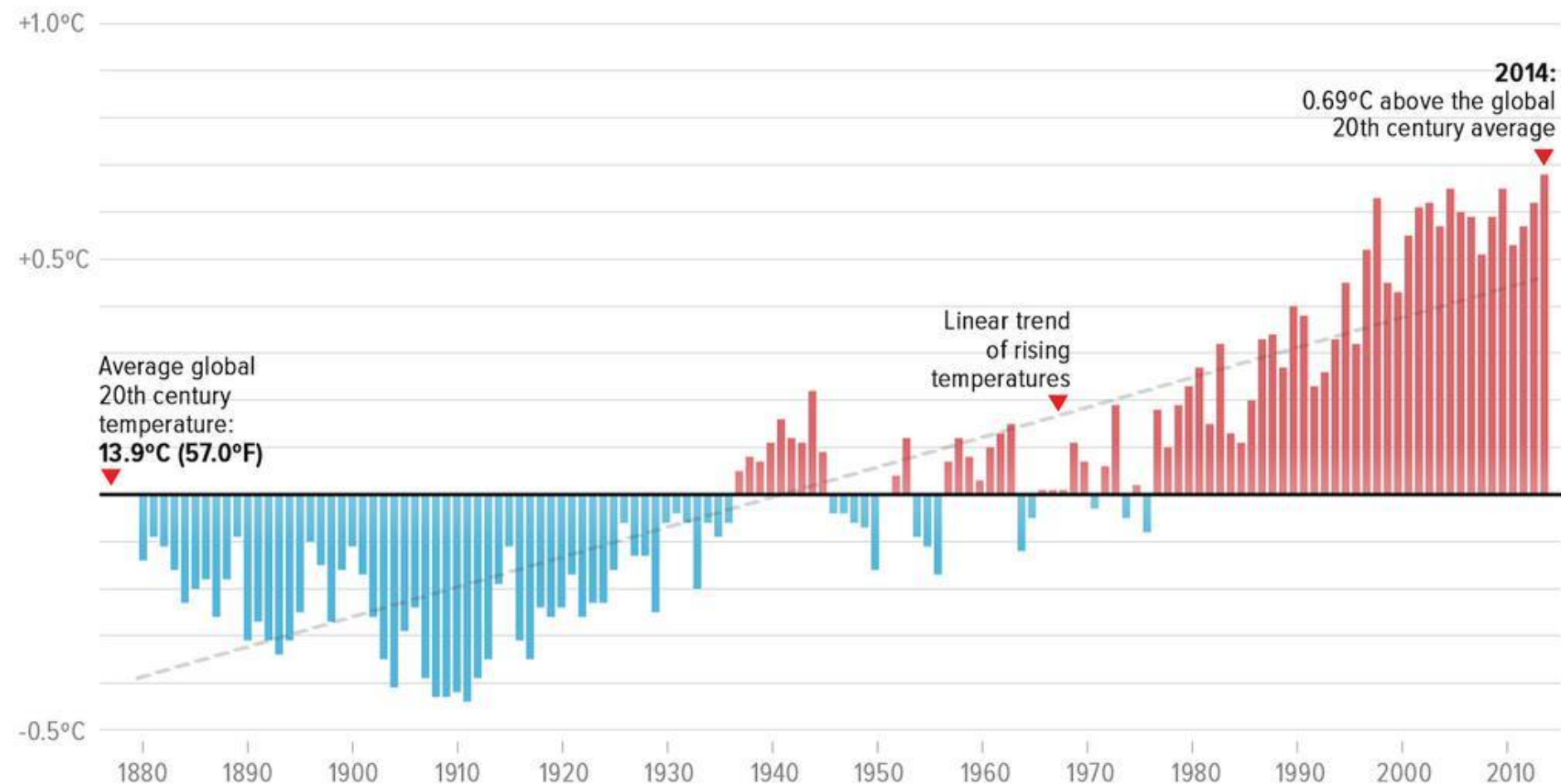
Climate Change



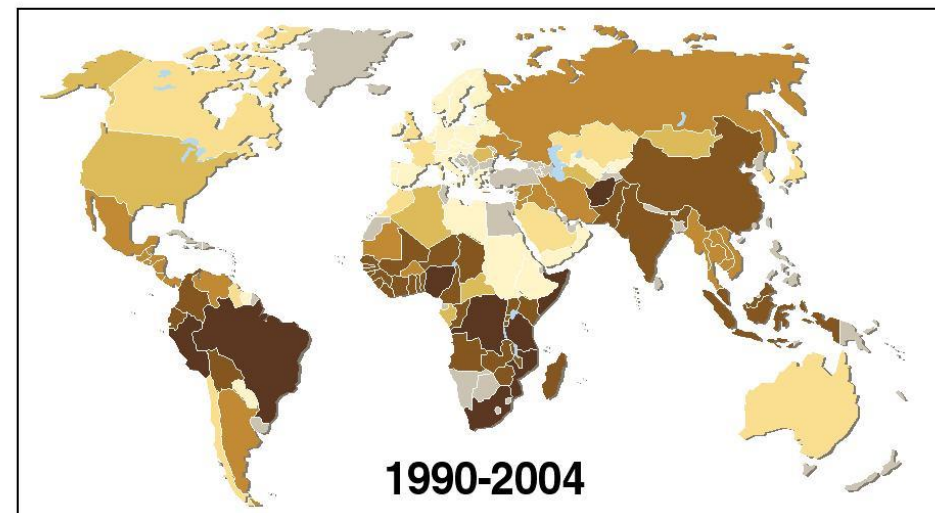
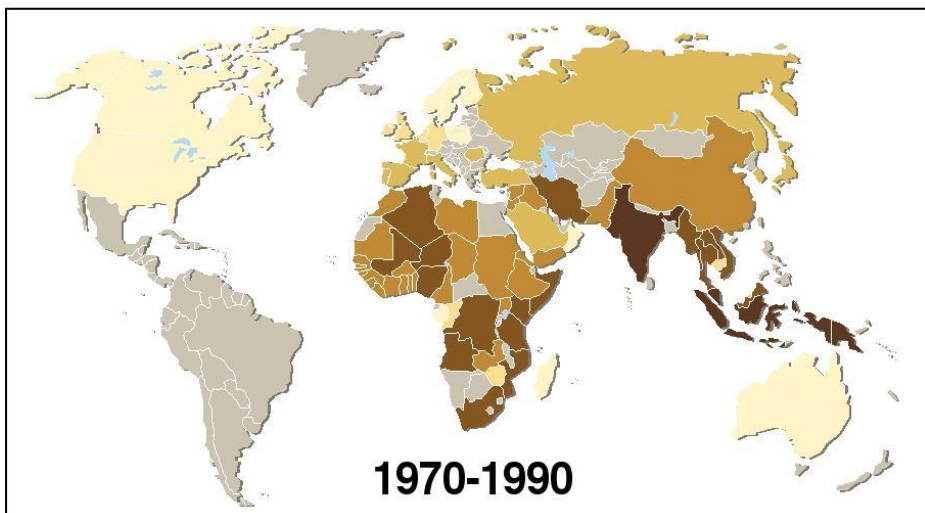
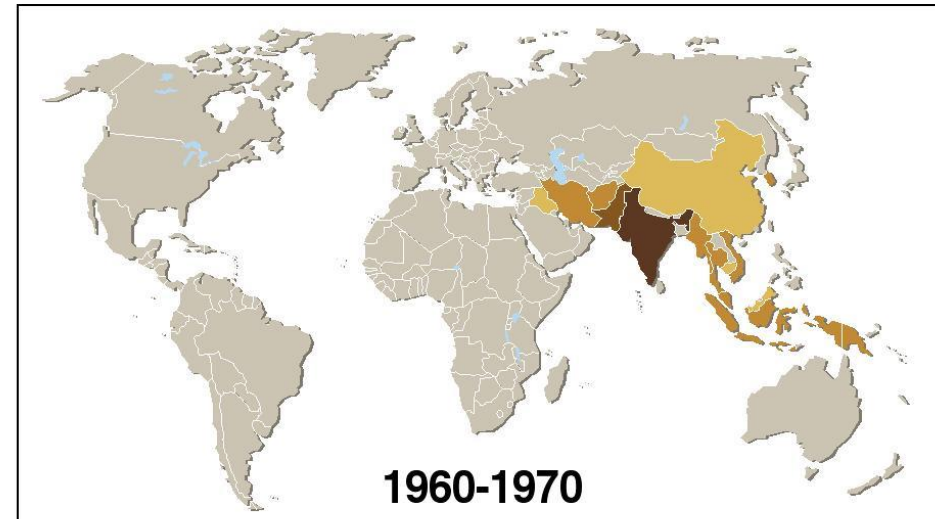
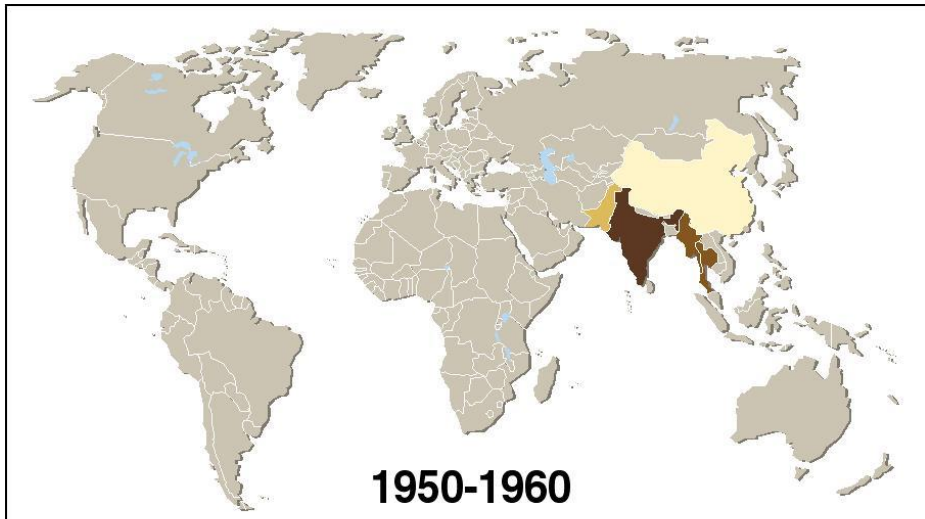


2014: The warmest year on record

2014 was the warmest year on record, with an average global temperature 0.69°C above the 20th century average.



Flood Related Infections



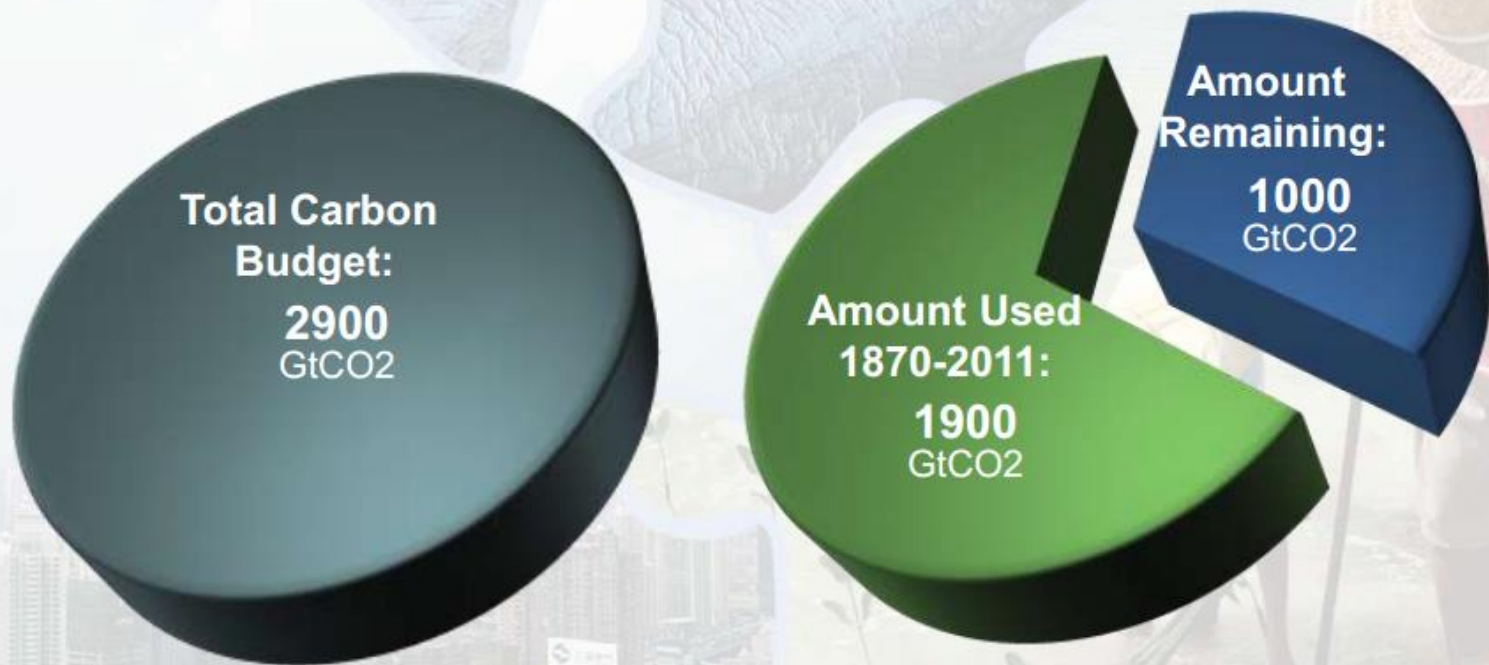
Number of cholera cases declared per country





The window for action is rapidly closing

65% of our carbon budget compatible with a 2°C goal already used



AR5 WGI SPM

IPCC AR5 Synthesis Report

ipcc
INTERGOVERNMENTAL PANEL ON climate change

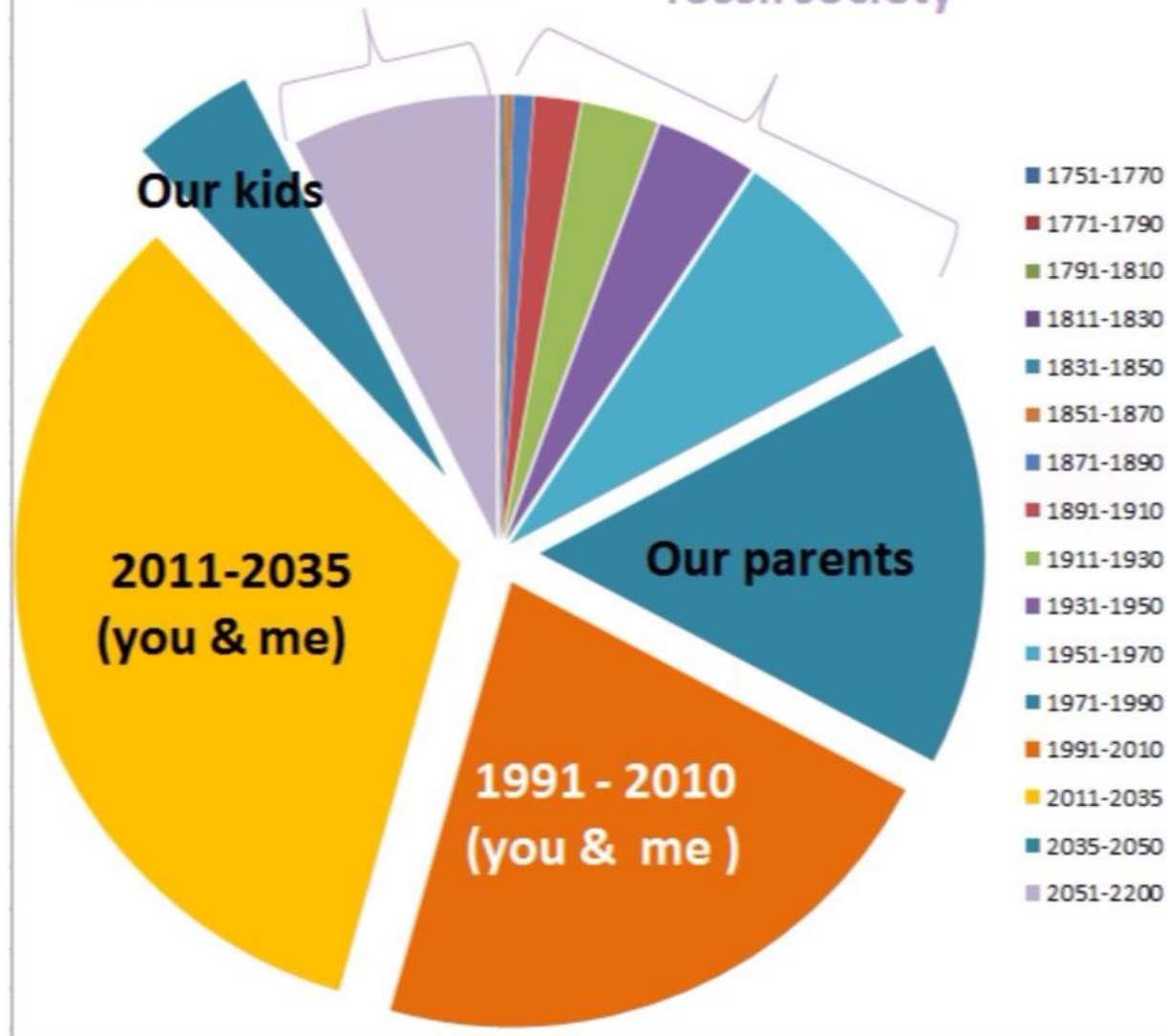


*Rajendra K. Pachauri, Chair of the IPCC,
to the opening session of COP20, Dec. 2014*

'Carbon Budget' per generation for 2°C

Remaining budget
for rest of mankind

Used to create
fossil society



Where does the money go?

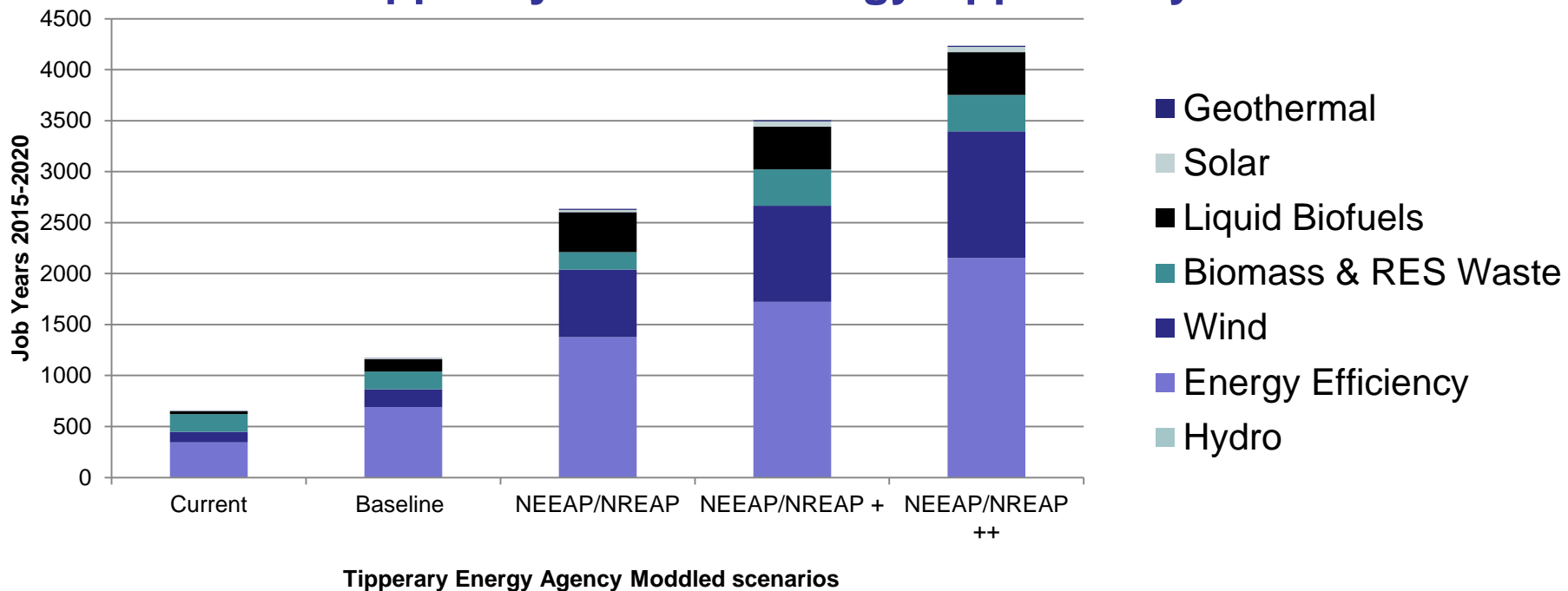


- 54% of EU imports to Russia (source eurostat)
- 25% of EU to the Middle East/ North Africa.
- EU citizens pay for destabilisation and insecurity by adopting cheapest at all cost policies.
- €6.7 Bn of our wealth exported.
- Fossil fuel subsidies to eliminate energy poverty rather than insulation/ renewables.
- Huge global subsidies for fossil fuel extraction (Corrib writing off 100% of development costs against tax ~ €3 Bn)



- EU fines for not meeting 2020 CO₂ targets will be €600M- €1Bn.
- Investing in our homes, business and communities will create jobs.

Tipperary's €500M Energy Opportunity



Our Options



Source	Climate	Cost (Eur/MWh)	Security
Coal	Catastrophic	Cheap	Medium
Gas	Poor	Medium (55-70)	Poor
Oil	Very Poor	Expensive (110+)	Poor
Nuclear*	Good	Very Expensive (110+)	Medium
Efficiency	Excellent	Medium	Excellent
Renewables	Excellent	Medium (60-110)	Excellent



- China, USA, Spain, Germany, UK, Denmark, Apple, Google all investing heavily in wind.
- It works in the Irish context (not without grid challenges)
- It is cheap for customers & profitable to develop.

However:

- In Ireland it is inequitable and predominantly developer led, increasingly then sold to capital markets.
- It does have a visual impact and too much is unwelcome.
- It is not welcomed by communities who have no say.

We should:

- Replace anti-wind with **Only if I Own.**



- Clear we need to transition to sustainable energy.
- The distributional impact to citizens & wealth transfer to Middle East/ Russia needs to be carefully considered.
- Politicians and policy makers need people to demand change.
- Fossil fuel lobby are undoubtedly impacting debate insidiously.
- Electric Ireland, Bord gais etc. make the majority of profit from fossil fuels.
- Solutions are available and I'm looking forward to hearing about them.





Tipperary Energy Agency

- Paul Kenny
- Chief Executive
- T: 052 7443090
- F: 052 7443012
- E: pkenny@tea.ie
- W: www.tea.ie
- Cahir
- Non profit, public good social enterprise
- Partnership approach
- Energy management
- Renewable energy and energy efficiency
- Procurement, project mgmt.
- Cost effective, value driven
- 12 expert staff