

# 18 FOR 0

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Changing the conversation about the future of  
electricity production in Ireland

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# About 18for0

- **Volunteers with Professional experience in:**
  - Power plant construction & O&M
  - Grid Infrastructure
  - Nuclear Safety & Licensing
  - Nuclear Medicine & Radiological Protection
- Concern about credibility of plan for net zero by 2050
- **Advocating to assess all clean energy technologies**
- Members of European SMR alliance; WeCARE

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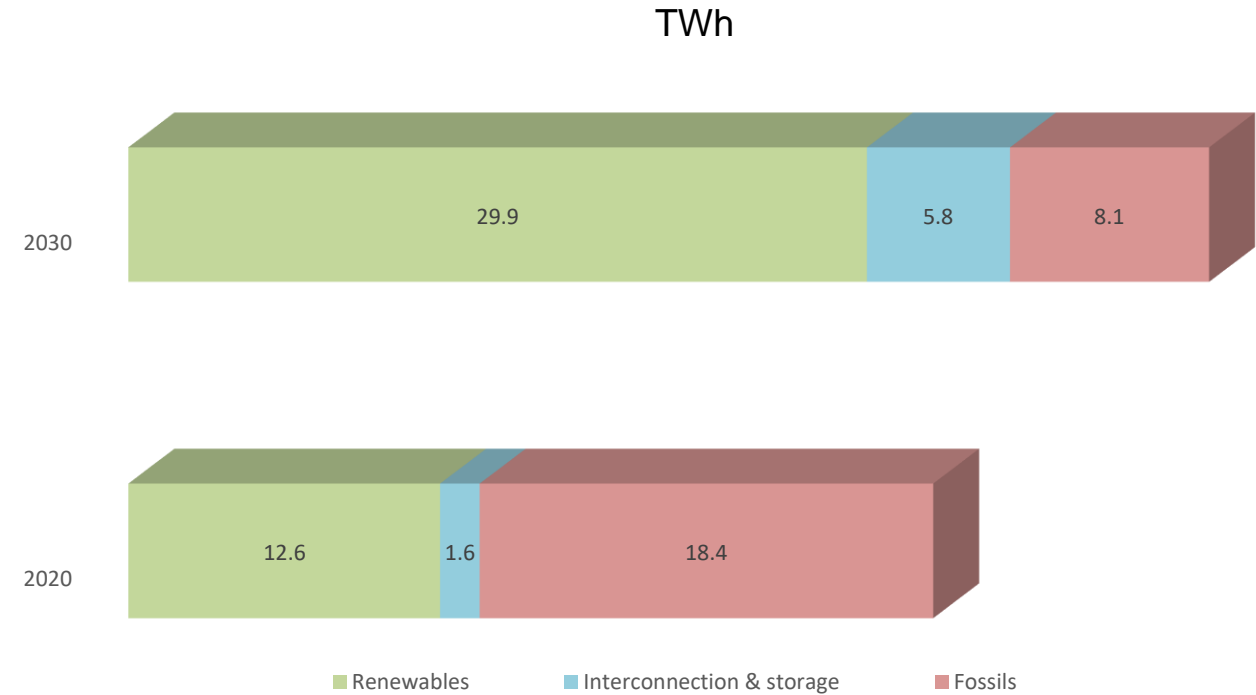
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# Electricity Production

- 60% from fossil fuels
- **Failure to achieve previous ambitious 2020 emissions reduction targets**
- Dependence on fossil fuel imports - **expensive and environmentally unsustainable**
- Climate emergency declared in May 2019
- **Emissions not falling fast enough and prices still rising**

# CAP19 – more of the same..

- **Another ambitious course of action**
- No specific policy statement on how to keep emissions on a reduction pathway beyond 2030.
- **Significant fossil fuel generating capacity required in 2030**



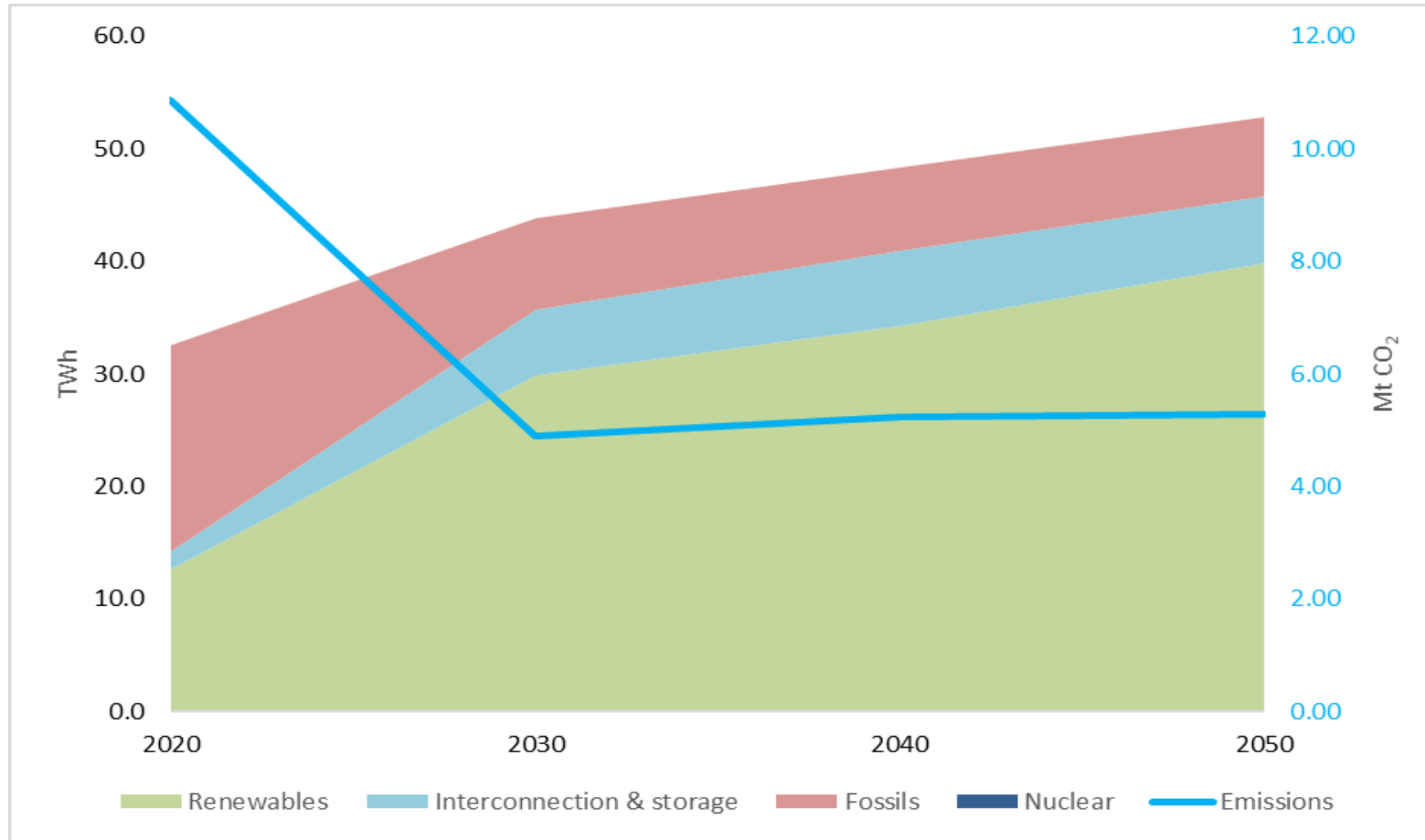
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# CAP 19 proposal

| Technology                      | 2020            | 2030               |
|---------------------------------|-----------------|--------------------|
| Renewables supply               | 40 %            | 70 %               |
| Renewables capacity             | 4,500 MW        | 13,500 MW          |
| Coal, peat & oil power stations | Open            | Shut               |
| Interconnection capacity        | 500 MW          | 1,700 MW           |
| Hydro pumped storage plant      | 290 MW          | 650 MW             |
| Battery storage plant           | 0               | 1,700 MW           |
| Greenhouse gas emissions        | 10 Million tons | 4 – 5 Million tons |

# CAP 19 Impact



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# CAP19 Grid challenges



- CAP19 by 2030 a “significant challenge”
  - Requires **unprecedented transformation of the entire electricity sector**
  - Uncertain nature of the changes required to allow large percentage of variable generation
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- **Increased risk of power shortages or blackouts**
  - Mitigating these risks likely to need **continued reliance on natural gas post 2030**
  - **Failure to achieve the March 2021 legally binding commitment of net zero by 2050**

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# Beyond CAP19

- Examining carbon capture and storage (CCS) ? **Not permitted**
- Use surplus wind energy to produce biofuels, synthetic gas, hydrogen or 'Power-to-x' technology? **Unproven** **Unproven** **Unavailable**
- **Not proven at scale as yet – will be commercially viable?**

## MaREI model for net zero by 2050

- Wind industry influence?
- Very challenging assumptions concerning technology not yet commercially viable
- Reflects current government policy – lacks credibility - significant risk
- If the assumptions not realised, Ireland could be locked into using natural gas

**No credible plan**

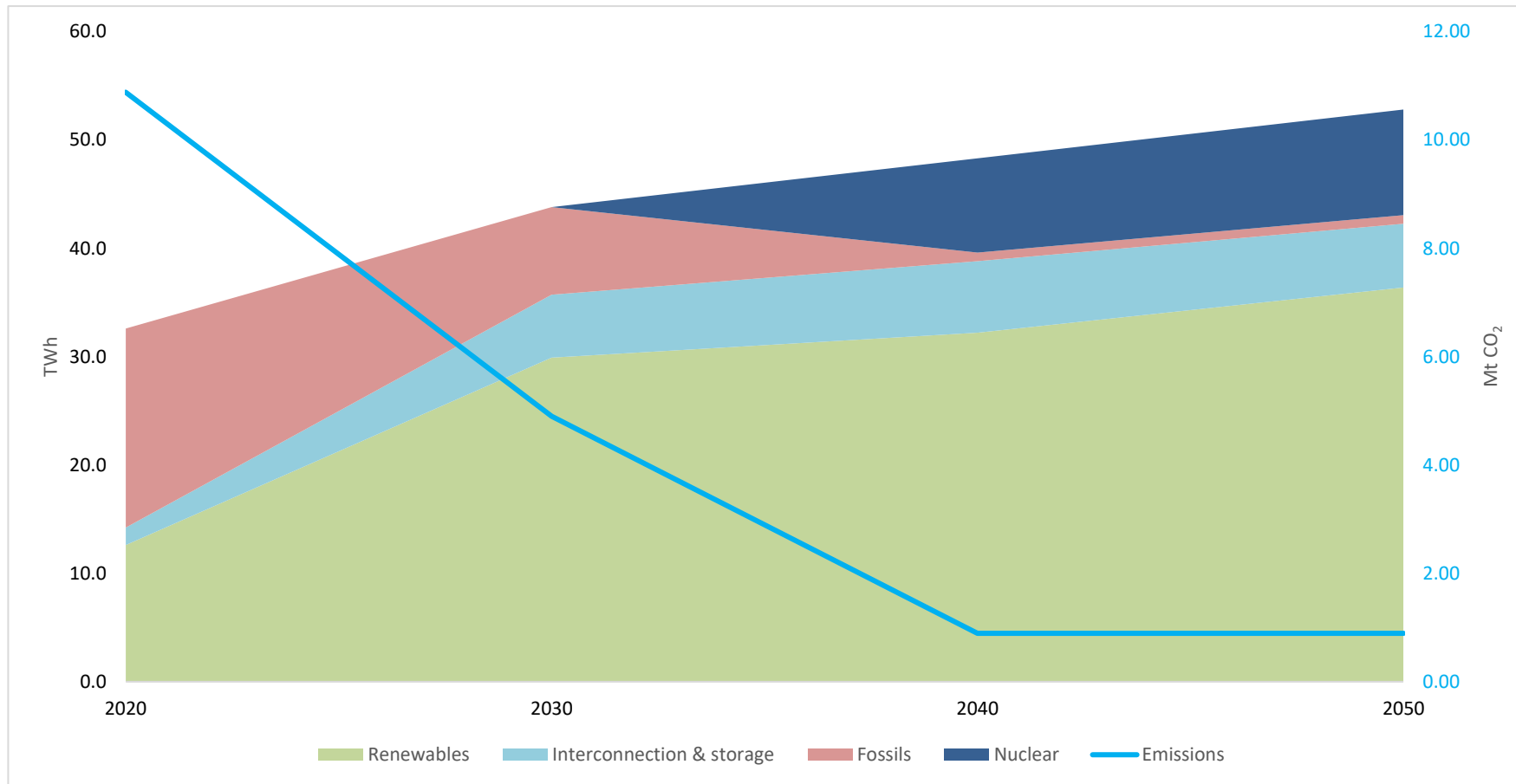
**Continuing trend - ambitious targets and failure to make decisions to ensure targets are met**

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# Options

- **Considering all low carbon electricity generation** is consistent with Ireland's environmental commitments
- Nuclear energy is proven, low-emissions technology - European Council's scientific arm (JRC) – **“as sustainable as other forms of low carbon electricity generation”**
- 18for0 study (2020) outlined a scenario for the introduction of nuclear power into the Irish grid
- **Adding 18% nuclear electricity can eliminate Ireland's reliance on natural gas and support long-term, permanent reduction in carbon emissions**

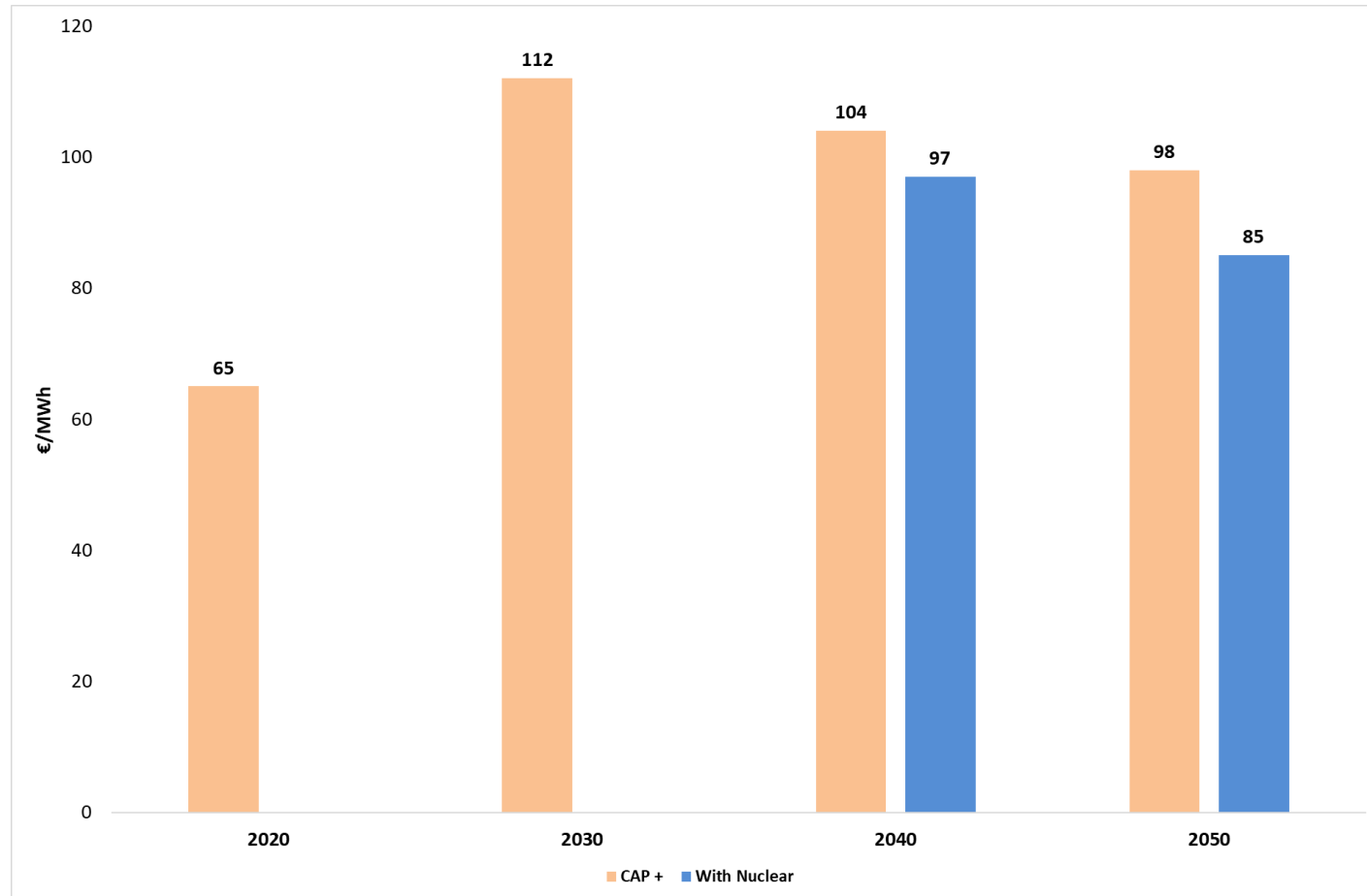
# 18for0 proposal



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# Costs



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# What next?

- Ireland's strategy to achieve net zero by 2050 is currently uncertain
- A single policy option - assumptions about technologies currently commercially unavailable
- To address this:
  - **Repeal the legislation that prohibits nuclear power in Ireland**
  - Commission an **independent assessment of all forms of low carbon electricity generation**
  - Drive a **public debate on the use of nuclear power in Ireland**

**The risks are too great... and too urgent...  
to ignore!!!**

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# What can I do?



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<https://www.whoismytd.com/>

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# Thank you



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