Designing Affordable and Clean Energy for a Resilient Energy System in ASEAN Communities: Perspectives from the UK

Isabelle de Lovinfosse, Head SEA COP26 Strategy, 29 October 2020
ACE Think Tank Roundtable, Singapore International Energy Week

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The Clean Energy Transition is now a global trend

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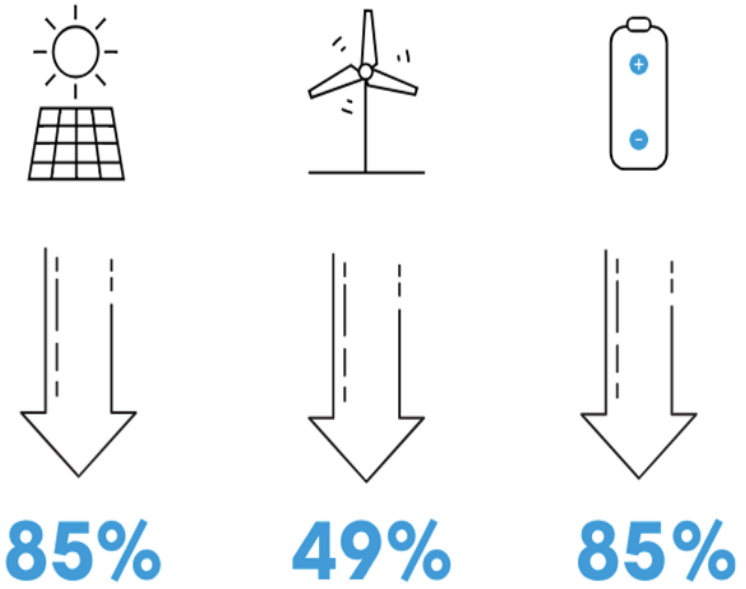
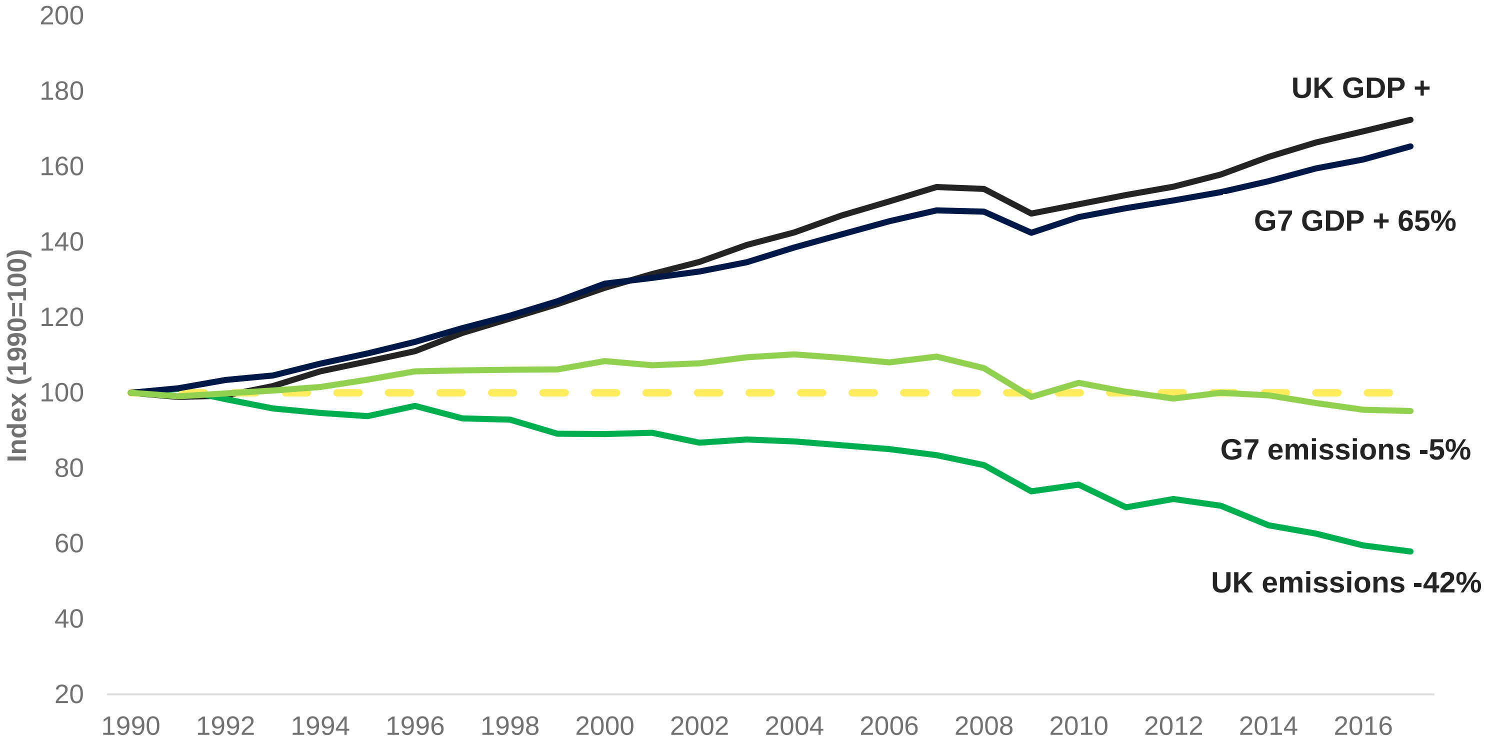
- Every $1 spent to advance the global energy transition **yields $3-8 in return.**
- By 2022, 60% of all coal plants globally will be uncompetitive
- Solar and wind now **cheaper than new coal** in all ASEAN Member States & these prices will continue to fall
- Investments in renewable energy generate **3x more jobs** than investments in fossil fuels
- Renewables can boost the economy in SE Asia by more than 4.4%, **growing jobs by almost 50%**
- **Green recovery** can also build **resilience to shocks**

Technology cost-declines since 2010 (Bloomberg NEF)

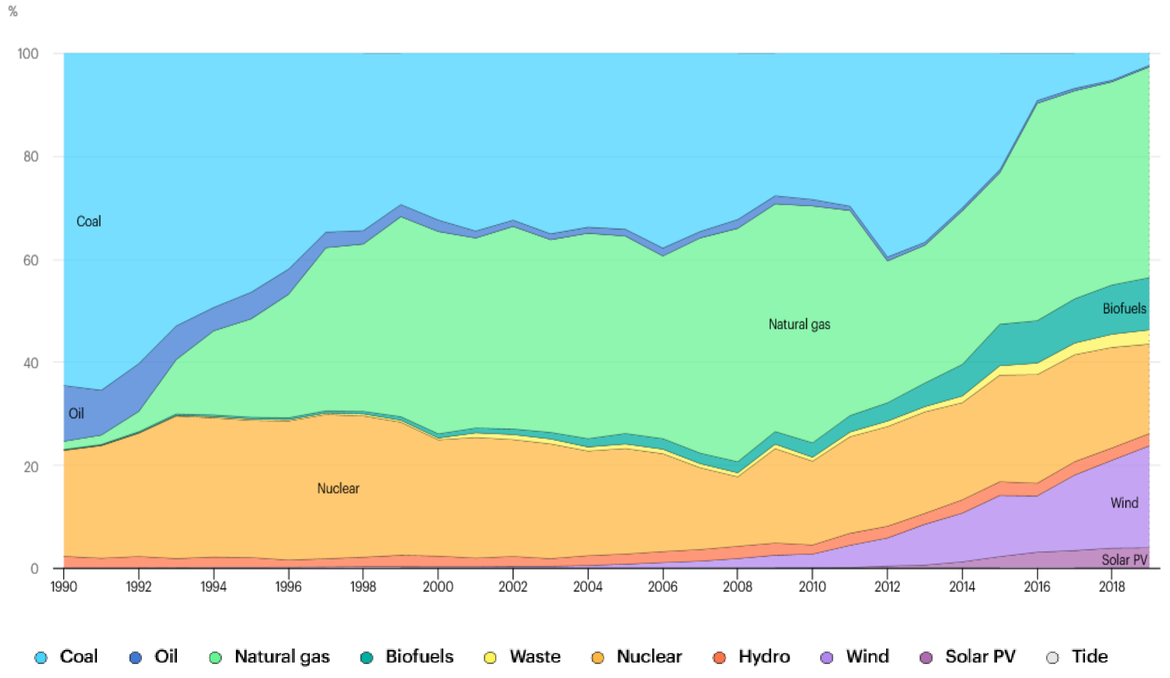


Decoupling of carbon emissions and economic growth in the UK



Source: World Bank. UNFCCC National Inventory Submissions. ONS.

UK has been removing coal from the electricity system in ~ 5 years



Source: IEA

40% Share of electricity from coal in 2012

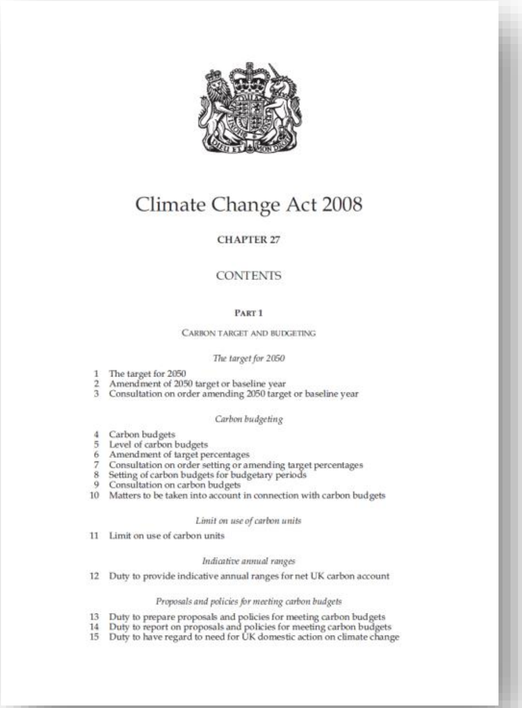
2% Share of electricity from coal in 2019

2025 Phase out date – under consultation to bring forward to 2024

Supported by:

- UK Climate Change Act
- Carbon pricing
- Coal phase out date
- Renewable subsidies
- Air quality regulation

Robust, long-term and legal climate policy frameworks in the UK



Climate Change Act 2008

CHAPTER 27

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PART 1

CARBON TARGET AND BUDGETING

The target for 2050

1 The target for 2050
2 Amendment of 2050 target or baseline year
3 Consultation on order amending 2050 target or baseline year

Carbon budgeting

4 Carbon budgets
5 Level of carbon budgets
6 Amendment of target percentages
7 Consultation on order setting or amending target percentages
8 Setting of carbon budgets for budgetary periods
9 Consultation on carbon budgets
10 Matters to be taken into account in connection with carbon budgets

Limit on use of carbon units

11 Limit on use of carbon units

Indicative annual ranges

12 Duty to provide indicative annual ranges for net UK carbon account

Proposals and policies for meeting carbon budgets

13 Duty to prepare proposals and policies for meeting carbon budgets
14 Duty to report on proposals and policies for meeting carbon budgets
15 Duty to have regard to need for UK domestic action on climate change

UK addressing the barriers to accelerate renewable deployment

Policy and regulation

- Lack of confidence in feasibility of new system models by energy policy makers, regulators, utilities
- Policy and regulatory environments not **conducive to investment in new technologies** in many countries
- **Support for fossil fuels** continues through direct and indirect subsidies
- **Lack of capacity** at national level to undertake robust planning and analysis and to engage with investors

Technology and systems

- Concerns around impact of **increased renewable variability on grid robustness and performance**
- Challenges of **increased flexibility** e.g. new grid infra, demand response, storage, baseload
- Challenges in moving to **cross-border trading** and **regional power pools**

Finance and investment

- **Weak pipelines of investment grade projects** – limited opportunities for large scale investment
- **Lack of competitive large-scale procurement** in many countries, increasing transaction costs
- **Weakness in policy and governance increase return expectations,** requiring **concessional finance**
- Aggressive developer competition leads to **unrealistic bids increasing project failure risk**

International coordination and support

International cooperation can **help overcome these barriers** through:

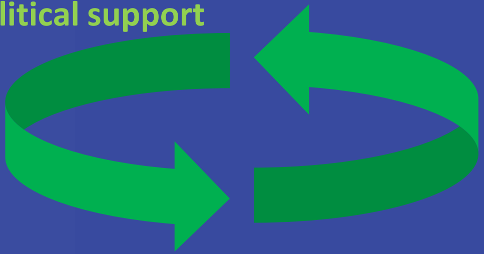
- Technical assistance
- Concessional finance
- Exchange of policy best practices

To make this support as effective as possible, we need a coordinated effort from development partners, focused on supporting national and regional plans for transition

COP26 Energy Transition Council

- Objective: to **accelerate the transition from coal to clean** power as part of a green economic recovery, through enhanced international cooperation.
- Bring together the **global political, financial and technical leadership** in the power sector over the 13 months to COP26.
- Create an **effective dialogue** between countries with energy transition needs and the international actors who can support them, to achieve demonstrable progress by COP26.

International technical, financial & political support package



Country commitments by COP26 to scale up clean power and scale back coal

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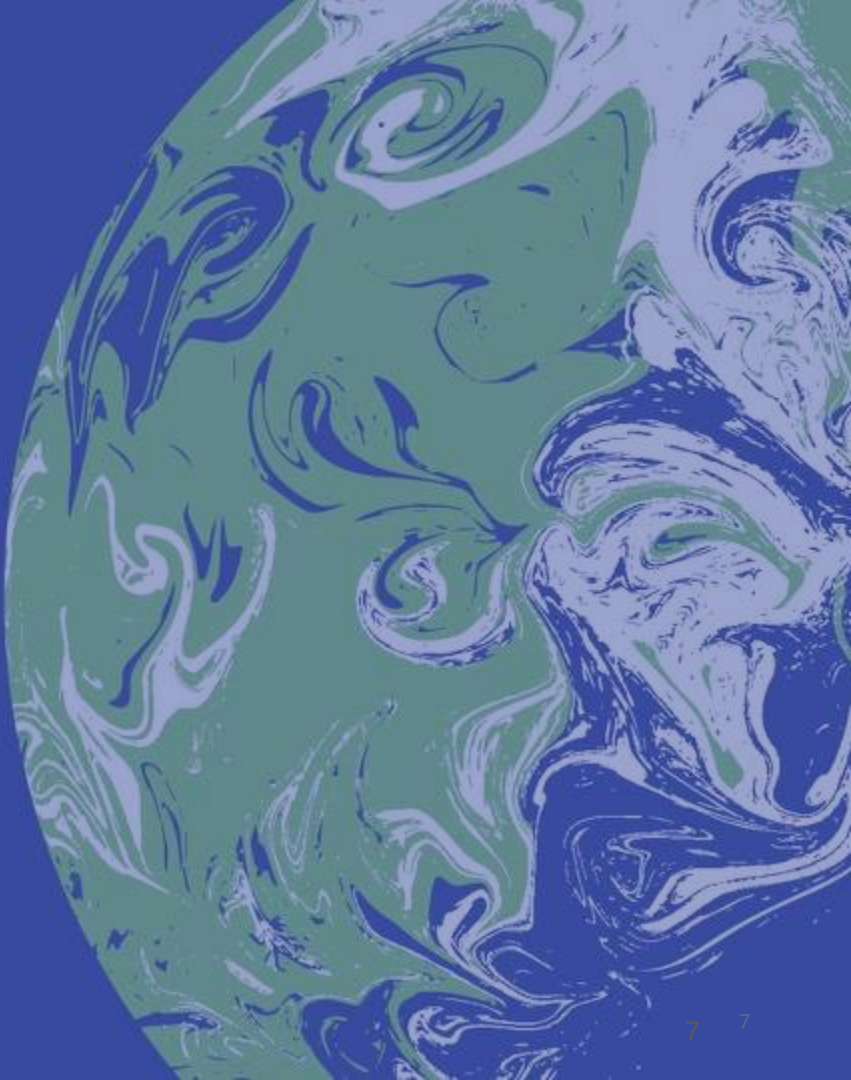

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