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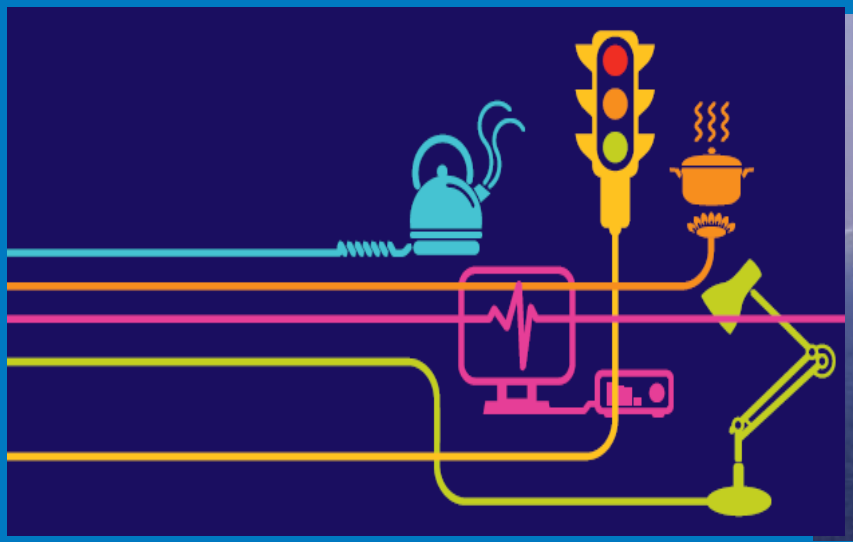
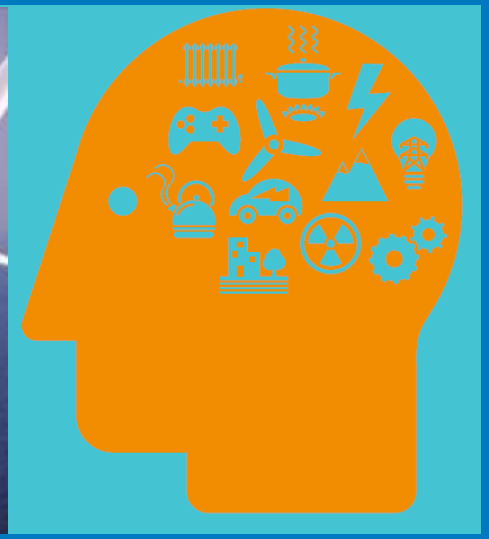
Energy Projects – Environmental Assessment and its Implications





EU Energy Infrastructure and Environmental Assessment procedures: options and challenges

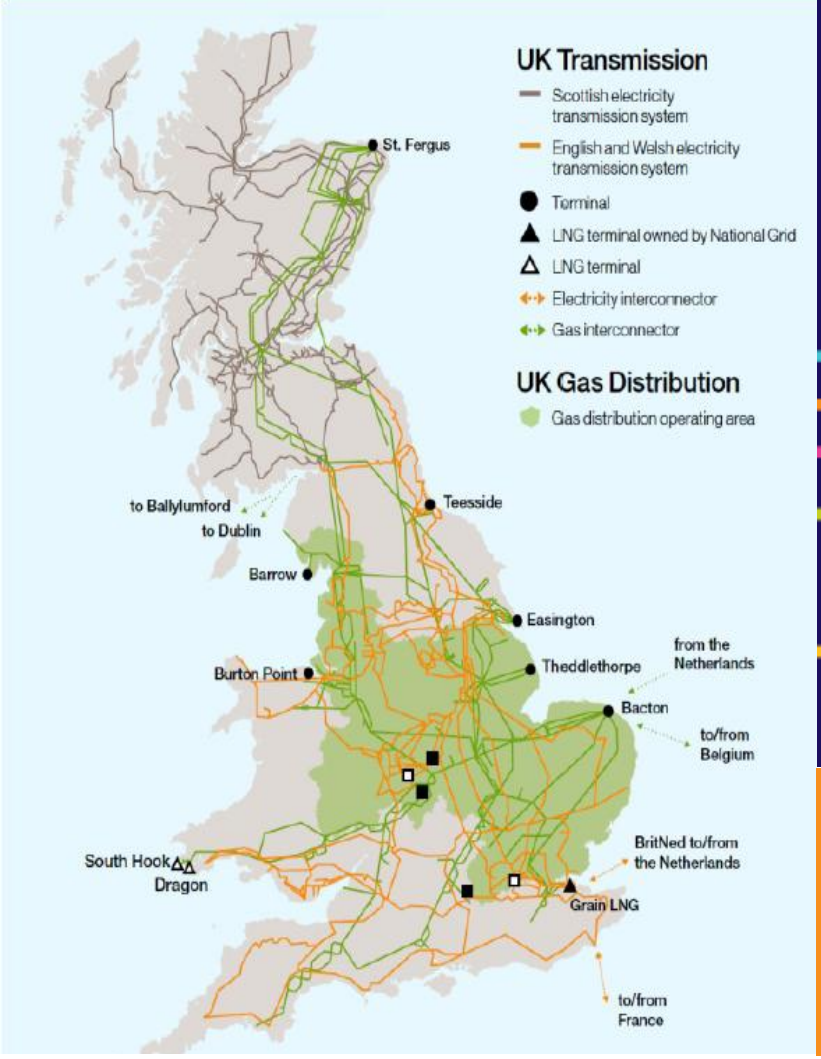
Hector Pearson

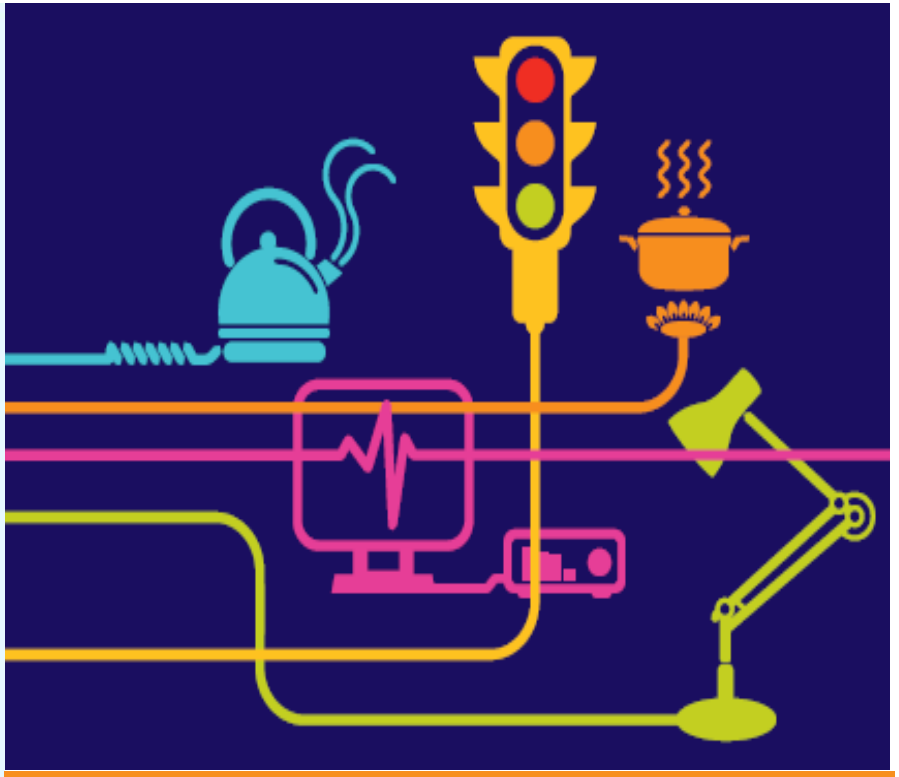
18th January 2013

What I will cover

- Who is National Grid?
- The energy and infrastructure challenge – role of National Grid
- In the context of streamlining permit granting procedures - Planning Act 2008
- National Grid project delivery and EIA
- Proposal (COM (2012) 628 final for Directive amending 2011/92/EU on EIA
- Generic EIA issues
- Conclusions

National Grid background





National Grid's job is to connect people to the energy they use to warm and light their homes, the power which keeps our factories and offices going, and the infrastructure essential to our modern lifestyle.

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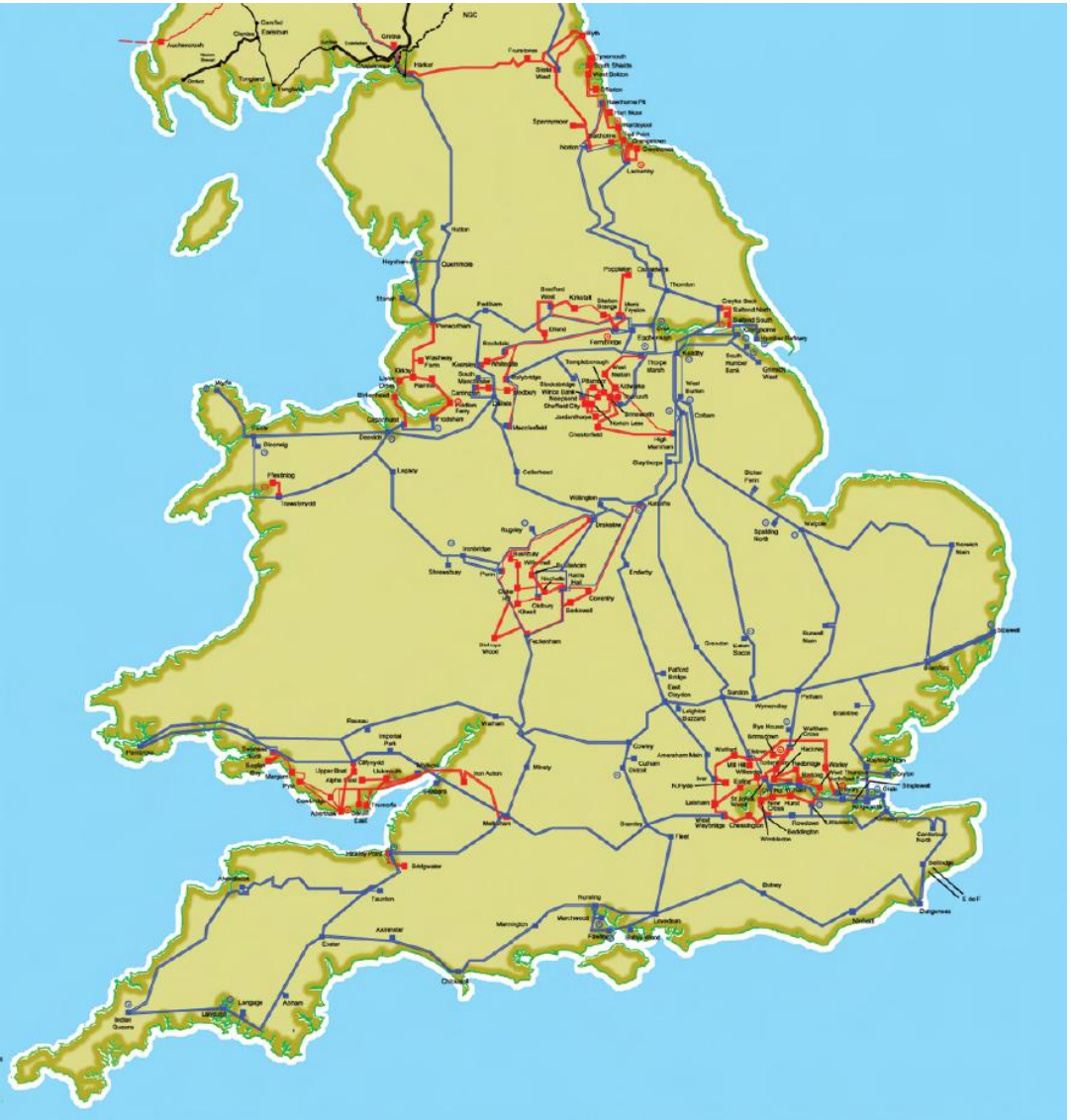
275kV and 400kV electricity network



- 84 major power plants connected (80GW installed capacity).
- Peak demand – 54.43GW (daily cold winter)
- 22,000 pylons
- approx 7,200 km of overhead line, approx 675 km of underground cable, and 337 substations at 244 sites.
- The largest centre of electricity demand is around London.

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The Future Energy Challenge

Sustainability

15% of all energy to come from renewable sources by **2020**

80% reduction in CO2 emissions by **2050**

Affordability

Gas from UK sources

~25%

of total supplies by 2020

Security of supply

Power station closures

~25%

of total capacity by 2020 vs 2010 levels

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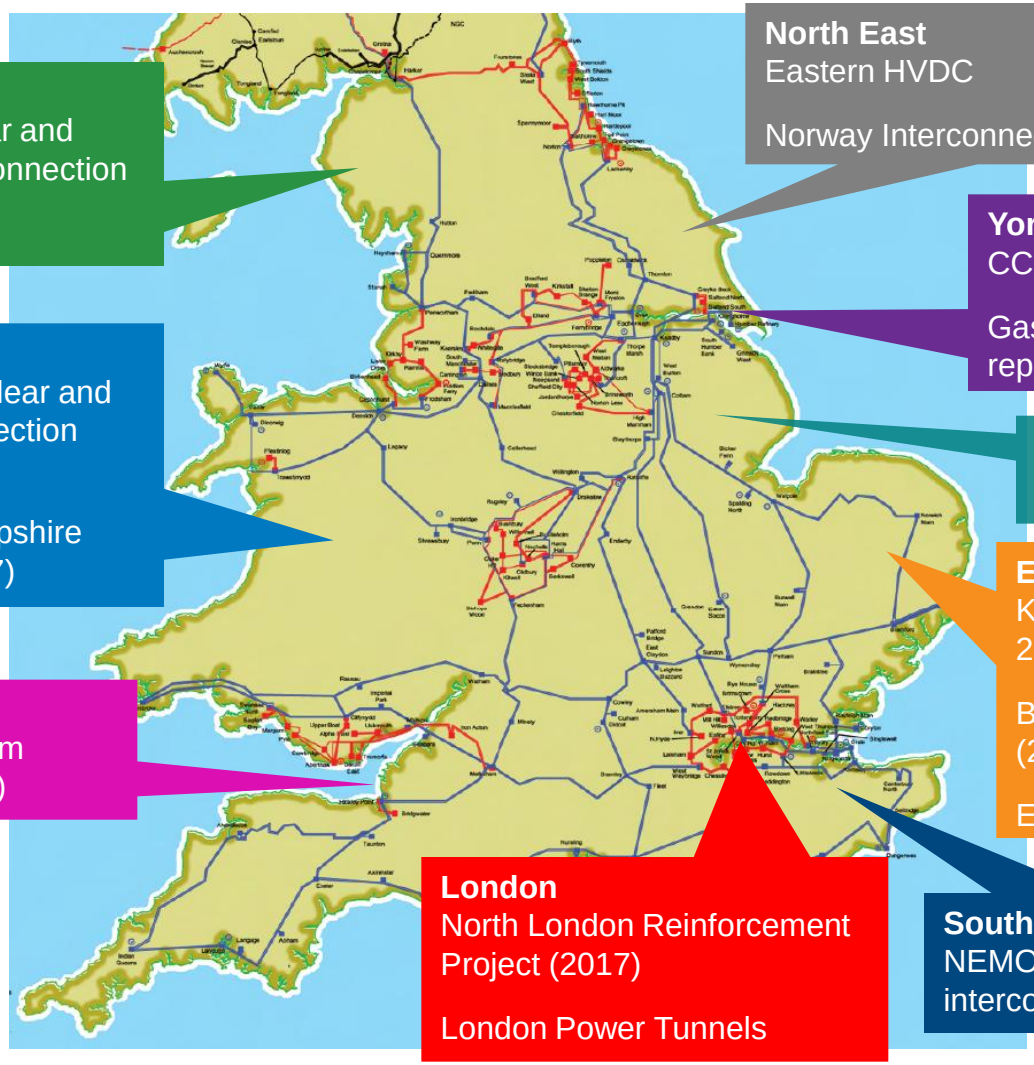
What does this mean for National Grid?



North West
Cumbria nuclear and wind c200km connection

Western HVDC

North East
Eastern HVDC

Norway Interconnector

Yorkshire and Humber
CCS pipeline

Gas transmission pipeline replacement

Wales
North Wales nuclear and wind 40km connection (2021)

Mid Wales/ Shropshire wind 45km (2017)

East Midlands
Triton Knoll wind connection

East Anglia
Kings Lynn CCGT connection 2km (2016)

Bramford to Twinstead tee 27km (2018)

East Anglia offshore wind (2022)

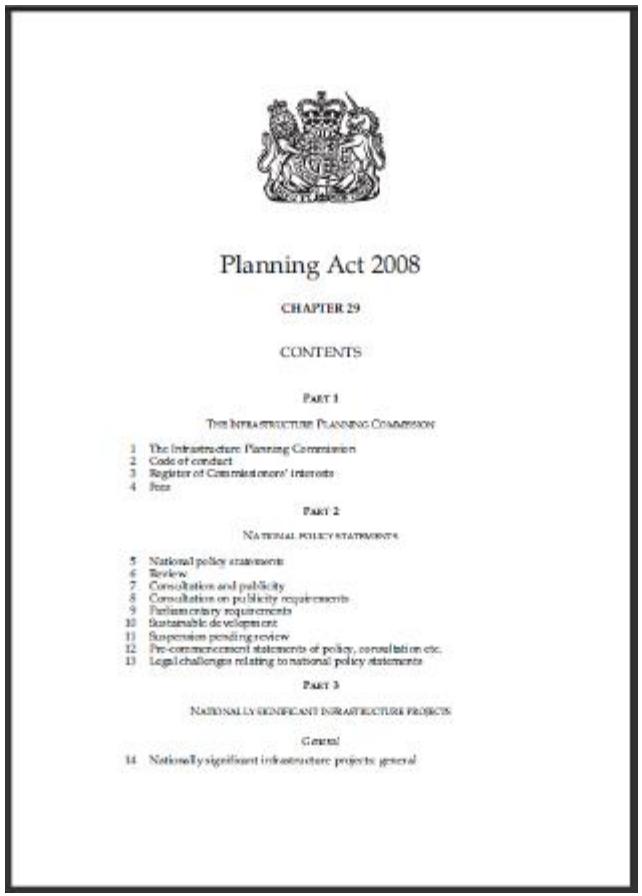
South West
Hinkley Point 57km connection (2020)

London
North London Reinforcement Project (2017)

London Power Tunnels

South East
NEMO Belgium interconnector (2018)

Planning Act 2008 - streamlining permit granting procedures?



Planning Act 2008

CHAPTER 29

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PART 1

THE INFRASTRUCTURE PLANNING COMMISSION

1 The Infrastructure Planning Commission
2 Code of conduct
3 Register of Commissioners' interests
4 Fees

PART 2

NATIONAL POLICY STATEMENTS

5 National policy statements
6 Review
7 Consultation and publicity
8 Consultation on publicity requirements
9 Parliamentary requirements
10 Sustainable development
11 Suspension pending review
12 Pre-commencement statements of policy, consultation etc.
13 Legal challenges relating to national policy statements

PART 3

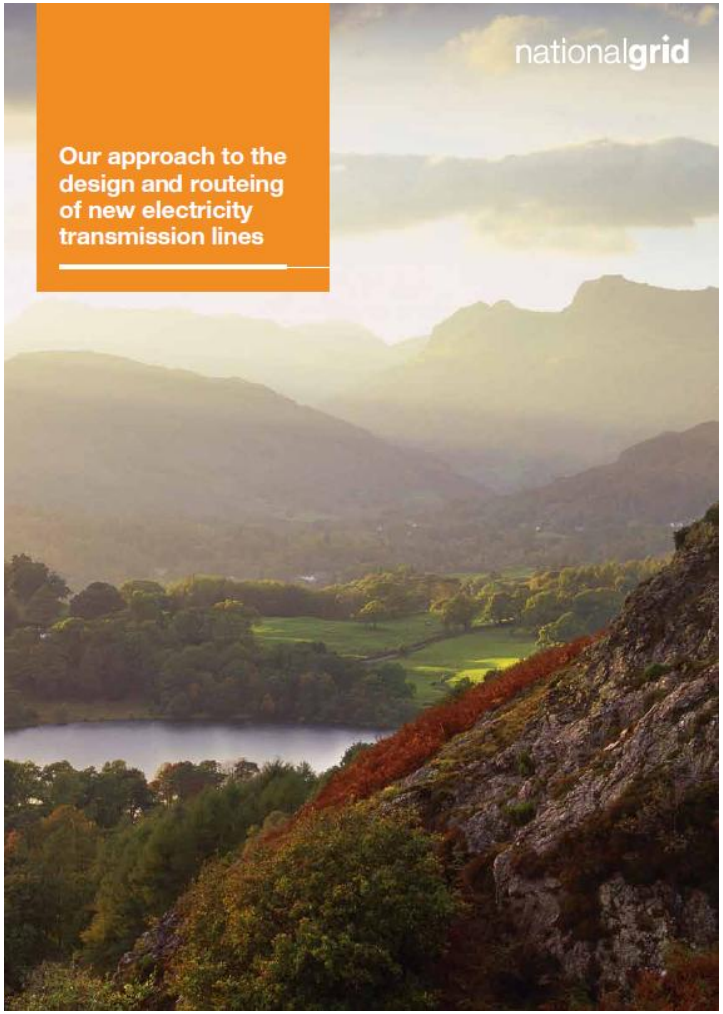
NATIONALLY SIGNIFICANT INFRASTRUCTURE PROJECTS

General

14 Nationally significant infrastructure projects: general

- **New consent regime for major infrastructure projects**
- New duty for **stronger community engagement** – must demonstrate how consultation has influenced proposals
- '**Frontloading**' – consultation at early stages of projects and important to get applications 'right first time'
- Significant **public interest and scrutiny** of new projects
- Applies to **England only**

Our approach to design and routeing new electricity transmission lines



- An approach to **routeing lines** – wider than undergrounding
- A **process** rather than a policy
- Recognises **environmental** and **social** impacts as well as system and cost issues
- Early and meaningful **engagement** with stakeholders and communities to understand local considerations
- Options Appraisal methods to be applied on a **case-by-case** basis – no preference for overhead or underground solutions
- Greater emphasis on **mitigating visual impact** – recognise that not all sites that are valued or important are in designated areas
- Followed a **consultation exercise on undergrounding** by National Grid
- Published September 2011

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Project delivery: Routeing and siting process

PLANNING ACT 2008 | **NATIONAL POLICY STATEMENTS** | **ELECTRICITY ACT** obligations | **TRANSMISSION LICENCE** obligations | **SECURITY AND QUALITY OF SUPPLY STANDARDS**

NEW ROUTEING APPROACH

NEED CASE for new infrastructure established

Stage 01: STRATEGIC OPTIONS identified / broad environmental appraisal

Stage 02: OUTLINE ROUTEING AND SITING studies / desktop environmental surveys & site visits

Stage: 03: DETAILED ROUTEING AND SITING developed / full EIA and surveys

Stages 04 and 05: APPLICATION FOR DEVELOPMENT CONSENT prepared and submitted

CONTINUING CONSULTATION and ENGAGEMENT *(stakeholders and communities)*

2-4 years

Stage 06: 12-18 MONTH EXAMINATION / DECISION PERIOD by Government advised by the Planning Inspectorate

Project delivery: EIA

PLANNING ACT 2008 | **NATIONAL POLICY STATEMENTS** | **ELECTRICITY ACT** obligations | **TRANSMISSION LICENCE** obligations | **SECURITY AND QUALITY OF SUPPLY STANDARDS**

NEW ROUTEING APPROACH

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CONTINUING CONSULTATION and ENGAGEMENT *(stakeholders and communities)*

2-4 years

Stage 06: 12-18 MONTH EXAMINATION / DECISION PERIOD by Government advised by the Planning Inspectorate

- Environmental Impact Assessment during Stage 03
- Full EIA on preferred alignment
- Consult key stakeholders on scope and results of study
- May use options appraisal to compare environmental and socio-economic performance of alternative alignments
- Results of appraisal published in Environmental Statement

Proposal to amend EIA Directive 2011/92/EU

- Comprehensive overhaul of EIA legislation at European level
- Potential shortcomings identified due to evolving policy, legal and technical context
- Proposal aims to correct shortcomings and enhance EU policy coherence
- Implications?

Implications of proposal to amend Directive 2011/92/EU on EIA

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Proposed change	Discussion points
Screening	Requirement for specific environmental information. May bring smaller projects into EIA regime, even if they have expedited local consents. May introduce burdens for major projects which are clearly EIA developments. Potential mitigation measures at this stage?
Scoping	Would be mandatory. Is good practice. Mandatory assessment of alternatives – extremely controversial for a developer.
Ex-post monitoring	Unrealistic requirements could be imposed However already carried out as best practice in some cases. Agree that more could be done. Who would monitor and enforce?

Implications of proposal to amend Directive 2011/92/EU on EIA

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Proposed change	Discussion points
Timescales	Decision-making deadlines welcome, but if one size fits all' than may disadvantage smaller projects
'One stop shop' for European Requirements – integrating assessments from other EU Directives	Different 'bars' for different directive – how to align? e.g. Birds Directive
Information requirements – content of Environmental Statements 'streamlined' to lighten administrative burden	Longer and more technocratic submissions? Would support more proportionate approach

Generic EIA issues – can these be addressed in the proposals?

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Issue	Discussion points
Alternatives	How to assess, and to what level of detail? When is a project a project?
Cumulative effects – difficult to deal with in practice	What is a project? When does one project end and and another begin? Anticipatory developments?
EIA v public engagement	Communities and individuals may say 'Why is the environment more important than me and my house?
SEA	Applicability in unplanned / market driven environments?
Issue of more information requirements – increases complexity and accessibility issues	Leads to huge documentation. Does anyone read more than 1 or 2 sections? UK Planning Inspectorate now asking for more concise environmental statements. Always easier for permitting authority to ask for

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Summary

The energy landscape is changing

Challenge is to ensure security of supply sustainably, safeguard the environment, whilst delivering value for money

Changes to National Grid processes driven by stakeholder engagement

Ongoing discussion over EIA Directive

Finding the best solution for communities and the environment – and for project delivery – is challenging!

Project delivery: Thresholds for EIA

Annex I projects: must be subject to EIA

(2) Thermal power stations with a heat output of **≥300 MW**, and **nuclear power stations** (including the dismantling or decommissioning)

(16) Gas pipelines with a **diameter of >800 mm** and a **length of >40 km**.

(20) Construction of **overhead electrical power lines** with a voltage of **≥220 kV** and a **length of >15 km**.

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Project delivery: Thresholds for EIA

Annex II projects: subject to EIA if likely to have significant effect on the environment

(3) Energy industry:

(a) Industrial installations for the production of electricity, steam and hot water (projects not included in Annex I);

(b) Industrial installations for carrying gas, steam and hot water; transmission of electrical energy by overhead cables (projects not included in Annex I);

(c) Surface storage of natural gas;

(d) Underground storage of combustible gases;

(e (f) Industrial briquetting of coal and lignite;

(g) Installations for the processing and storage of radioactive waste (unless included in Annex I);

(h) Installations for hydroelectric energy production;

(i) Installations for the harnessing of wind power for energy production (wind farms).

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Project delivery: Thresholds for EIA

Annex II projects: subject to EIA if likely to have significant effect on the environment

- **Thermal power stations** with a heat output of <**300 MW**
- **Extensions** to power stations

- Construction of **overhead electrical power lines** in **sensitive areas** (projects not included in Annex I)
- Construction of **overhead electrical power lines** with voltage of **≥132 kV**