ETI Project Selection Criteria

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What is the ETI?

- The Energy Technologies Institute (ETI) is a public-private partnership between global industries and UK Government

Delivering...
- Targeted development, demonstration and de-risking of new technologies for affordable and secure energy
- Shared risk

- Established in 2007 with a 10 year ‘design life’, followed by ‘soft stop’
  - CCS Programme will be substantially complete by December 2017
Project Selection

- The ETI develops bespoke criteria for each project

- ‘Project Outcome’
  - Ensure focus on key outcome required

- Gateway Criteria
  - The ‘Must Haves’

- Selection Criteria
  - Differentiators between bids

- Example: NGCT2 Request for Proposals, October 2013
Desired Project Outcome (NGCT2)

The overall aim of the Demonstration Project is to develop a technology with the potential to make a substantial reduction in capital and operating costs of gas-fired power with CO$_2$ capture, which will be ready to catch the wave of CCS implementation expected to occur in the 2020s and early 2030s. The desired outcome of the Project is:

**The Demonstration Project should provide the validation necessary to build confidence in investment, by others, in a substantially full-scale demonstration or first of a kind unit**
Gateway Criteria (NGCT2)

G1  Suitable for capture from gas-fired power stations
    • new build and economic retrofit of existing plant, or:
    • potential to provide a practical and economically-competitive alternative to a CCGT retrofit

G2  < 41 g CO₂/kWh net (90% capture)
    > £5/MW-hr reduction in LCOE

G3  Meets CO₂ purity spec, no worse than benchmark for flexibility, availability, footprint, environment

G4  Location of technology development.
    • identified test site where unit will be tested
    • robust plans for how the unit will interface with the host site
    • commitment from the host site to provide the required facilities

G5  Plans sufficiently developed to enable high level of confidence that the Demonstration Project can be successfully delivered within the time and budget proposed.
Selection Criteria (NGCT2)

- Technology Potential – projected performance against benchmark
- Ability to deliver
- Location of technology development
- Attractiveness of commercial offer
- Risks of reaching agreement with the ETI
  - Willingness to materially comply with proposed contract
  - Level of commitment from host site
  - Availability & security of project funding
  - Availability of resources to get to contract
- Value for money with respect to ETI funding
- Technology readiness
- Quality, clarity & credibility of validation & demonstration plan
- Quality, clarity & credibility of exploitation plans
- Ownership, robustness, distinctiveness and completeness of Background IP
### Project Costs, not Technology Costs

<table>
<thead>
<tr>
<th>Plant No</th>
<th>Description</th>
<th>Levelised Cost</th>
<th>Risk</th>
<th>Adjusted Cost</th>
<th>Adjusted LCOE at 10% rate</th>
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</thead>
<tbody>
<tr>
<td>No1</td>
<td>New trunk, store</td>
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<td>15.6</td>
<td>118</td>
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<td>No2</td>
<td>Scope reduction</td>
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<td>New Technology Risked (Target)</td>
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<td>11.1</td>
<td>87.1</td>
<td>1.03</td>
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</tbody>
</table>

- **GAS PLANT**: 860MWe
- **RISK**
- **LEVELISED COST**
- **LCOE at 10% rate**
- **ADJUSTED COST**
- **Adjusted rate vs 10% rate**

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