Provide Scotland’s universities with a competitive advantage through dynamic **collaborations**, and encourage their researchers to **pool their resources** to respond to increasing **international** competition.
ETP is…

An alliance of 13 Scottish HEIs engaged in world-class energy-related RD&D with world-class facilities
ETP Partner Locations
Mission

To translate **excellent research** into **economic impact**
By building on the existing areas of **academic excellence** and **collaborative working** we will make sure that Scotland remains now and into the future a world renowned source for **energy related RD&D** and its commercialisation.
ETP’s Aims

**World Class Research**
Helps develop a Scottish energy research base that is internationally competitive

**Impact**
Creates value for the Scottish economy & society:
Communication, conferences, seminars, workshops

**Skills**
Supports the energy sector with the skills it needs
ETP New Organisation

ETP Board
- ETP Chair
- ETP Deputy Chair
- ETP Exec Director
- HEI partners
  To meet 2X pa

Stakeholder Advisory Group
- Independent Chair
- Industry representatives
- ETP Chair & ETP Deputy Chair as observers
- ETP Exec Director
  To meet 2X pa

Research Advisory Forum
- ETP Deputy Chair
- ETP Exec Director
- SUPA Rep
- Energy Leads of sister SFC Pools
  To meet 2X pa

Executive Director’s Advisory Group
- ETP Chair
- ETP Deputy Chair
- ETP Exec Director
- 2 others
  To meet quarterly, or as and when required.

ETP Management Team
- Executive Director
- Project Manager
- Project Assistant
- Comms Assistant

Externally Funded Programmes
- ETP DEP Chair
- ETP Exec Director
- SUPA Rep
- Energy Leads of sister SFC Pools
  To meet 2X pa

SFC Core Programme
- 11 Theme Coordinators
- Theme Groups

Externally Funded Programmes
- Energy Industry Doctorates
- KEN
- PECRE Exchanges
- PhD Students & ECRs

7 BDMs
PhD Students

# ETP Advisory Group

<table>
<thead>
<tr>
<th>Member</th>
<th>Role</th>
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<tbody>
<tr>
<td>David Sigsworth</td>
<td>Chair</td>
</tr>
<tr>
<td>Morven Cameron</td>
<td>Highlands &amp; Islands Enterprise</td>
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<tr>
<td>Seonaid Vass</td>
<td>Scottish Enterprise</td>
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<tr>
<td>Fiona Riddoch</td>
<td>Heat</td>
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<tr>
<td>Stuart Fancey</td>
<td>Scottish Funding Council</td>
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<tr>
<td>Hannah Smith</td>
<td>Scottish Renewables</td>
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<tr>
<td>Steve Wyatt</td>
<td>Offshore Renewable Energy Catapult</td>
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<tr>
<td>Stuart Haszeldine</td>
<td>Scottish Carbon Capture &amp; Storage</td>
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<td>Colin McNaught</td>
<td>Ricardo</td>
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<tr>
<td>Jim Smith</td>
<td>SSE</td>
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<tr>
<td>Richard Knight</td>
<td>Energy System Catapult</td>
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<tr>
<td>Paul de Leeuw</td>
<td>Oil &amp; Gas Institute</td>
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<tr>
<td>Sue Kearns</td>
<td>Scottish Government</td>
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<tr>
<td>Jim Sutherland</td>
<td>SP Energy Networks</td>
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<tr>
<td>Vinay Mulgundmath</td>
<td>Doosan Babcock</td>
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<tr>
<td>Jim McDonald</td>
<td>ETP Chair</td>
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<tr>
<td>Paul Mitchell</td>
<td>ETP Deputy Chair</td>
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<tr>
<td>Stephen-Mark Williams</td>
<td>ETP Executive Director</td>
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<tr>
<td>Member</td>
<td>Affiliations</td>
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</tbody>
</table>
| Ian Watson         | **Supergen Bioenergy** Core Management Group: Member  
                        **Phyconet** Management Board: Member  
                        **IBioIC** (Industrial Biotech Innovation Centre) Scientific Advisory Board: Member |
| Mathieu Lucquiaud | **SCCS** (Scottish Carbon Capture & Storage ) Directorate: Member                                                                             |
| Serena Corr        | **EPSRC** Energy Strategic Advisory Committee: Member  
                        **Supergen Energy Superstore Hub**: Member  
                        **Supergen Energy Superstore Hub** Science board: Member                                  |
| Eddie Owens        | **Heriot-Watt Energy Academy**: Deputy Director                                                                                               |
| Zhibin Yu          | **UK Thermal Energy Storage Network**: Member  
                        **Supergen Solar Energy**: Member                                                                                                           |
| David Ingram       | **Supergen UKCMER** Centre Management Team: Research Director  
                        **IDCORE** (Industrial Doctorate Centre in Offshore Renewable Energy): Programme Director                                           |
| Richard Neilson   | **OGIC** (Oil & Gas Innovation Centre) Project Review Panel: Member  
                        **OGTC** (Oil & Gas Technology Centre) Academic Advisory Panel: Member                                                                     |
| Graeme Burt        | **European Energy Research Alliance** Joint Programme Smart Grid: Steering Committee Member  
                        **European Association of Distributed Energy Resources Laboratories** (DERlab): Spokesperson for the Board  
                        **PNDC** (Power Networks Demonstration Centre): Lead Academic  
                        **Future Networks & Smart Grids CDT**: Advisory Board Member  
                        **Supergen Hubnet**: CI                                                                                                                   |
| Neil Robertson     | **Supergen SuperSolar Hub**: Associate Member  
                        **SISER** (Scottish Institute for Solar Energy Research): Member, former Director                                                              |
| Bill Leithead      | **Supergen Wind Hub**: Program PI  
                        **European Academy of Wind Energy**: Member  
                        **Wind & Marine Energy Systems CDT**: Director                                                                                                 |
| Karen Turner       | **Royal Society of Edinburgh Scotland’s Energy Future Inquiry**: Committee Member  
                        **UK Energy Research Centre**: Project CI and Academic Conference Steering Group Member                                                   |
Resources - People

200 Academics

700 Researchers
Resources - Facilities

EMEC

FloWave

PNDC

AFRC
Resources – Wind Turbine Facilities

NWEC

Levenmouth

EOWDC

NWTF
## ETP Theme Coordinators

<table>
<thead>
<tr>
<th>Theme</th>
<th>Coordinator</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>Wind Energy</td>
<td>Bill Leithead</td>
<td>Strathclyde</td>
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<tr>
<td>Marine Energy</td>
<td>Henry Jeffrey</td>
<td>Edinburgh</td>
</tr>
<tr>
<td>Bioenergy</td>
<td>Ian Watson</td>
<td>Glasgow</td>
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<tr>
<td>Solar PV</td>
<td>Neil Robertson</td>
<td>Edinburgh</td>
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<tr>
<td>Energy Utilisation in Buildings</td>
<td>Eddie Owens</td>
<td>Heriot Watt</td>
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<tr>
<td>Oil &amp; Gas</td>
<td>Richard Neilson</td>
<td>Aberdeen</td>
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<tr>
<td>Power Systems &amp; Networks</td>
<td>Graeme Burt</td>
<td>Strathclyde</td>
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<tr>
<td>Energy Conversion &amp; Storage</td>
<td>Serena Corr</td>
<td>Glasgow</td>
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<tr>
<td>Heat Energy</td>
<td>Zhibin Yu</td>
<td>Glasgow</td>
</tr>
<tr>
<td>Energy, People, &amp; Society</td>
<td>Karen Turner</td>
<td>Strathclyde</td>
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</table>
Programs

ETP Energy Industry Doctorate Programme

Funded by SFC & the Scottish Government

101 studentships supported over 5 years

18 studentships to be funded over the next 3 years

PECRE (Post-Graduate Early Career Researcher Exchanges)

Bursaries of £3k available for international exchanges
Available to all PECRs in ETP universities

29 grants awarded so far

KEN (Knowledge Exchange Network)

Team of 7 BDMs covering low-carbon sector
Foster and manage collaboration between industry and academia
ETP Energy Industry Doctorate Programme
ETP Energy Industry Doctorate Programme

addresses the strategic demands of industry and government for industry ready post-doctoral researchers to enhance energy industry innovation and knowledge exchange effectiveness
ETP Energy Industry Doctorate Programme

- Funded 101 Energy Industry Doctorates across all themes
- Each doctorate has two supervisors from different ETP universities.
- Studentships funded on 1/3 1/3 1/3 model
- Over £3M leveraged in from industry partners: companies are co-investors, support project specification and engage directly with the research
- Industrial partner can be any size, any location
- Up to £30k from ETP, remainder split between university and industrial partner (can be in-kind).
- Full list of projects on ETP website
Along same lines as previous calls
Deadline for proposals is 31st August 2018
For projects that support the themes of the Scottish Government’s Energy Strategy
At least 6 awards to be made
Application form on ETP website
PECRE
Bursaries of £3k available for international exchanges
Available to all PECRs in ETP universities
29 grants awarded so far over the last 3 years
£25k available this year – deadline 31st August 2018
Support the Scottish Government in meeting its targets for the energy sector

Increase the innovation capacity of SMEs in low carbon

Improve industry access to academic capability
Knowledge Exchange

Industry

Academia

Public Sector
SG, SE, HIE, SDI
The Knowledge Exchange Network is...

A team of 7 BDMs

£525k Fund for small collaborative projects

Special interest groups
## KEN Support

### Industry Engagement Fund
- Small knowledge exchange projects
- Free to Scottish SMEs
- Academic time, travel, consumables, prototypes, testing

### Access to resources
- 700 researchers
- Collaborations and alliances
- Over 40 world-class facilities within the SEL and beyond

### Research funding
Support with applications to funding, including
- EU funding eg Horizon 2020 SME Instrument
- SE grants eg SMART, R&D grants
- etc
KEN Organisation

ETP Core Team

11 Academic Theme Coordinators
Theme Groups

Team of 7 Business Development Managers
Industry Engagement Fund – Requirements

Scottish SME

Low carbon project for commercialisable new product or process

Innovative + knowledge exchange

>30% contribution to costs

University partner
Innovation Funding Escalator for Industry – Academic Engagement

- Innovation Voucher: £5k (50% SME in-kind)
- Student Placement IV: £5k (50% SME in-kind)
- Industry Engagement Fund: £20k (30% SME in-kind)
- IV Follow-on: £20k (50% SME in cash)
- Collaborative R&D: £200k max (40% cash, 20% in kind)
- Knowledge Transfer Partnership: £150k (33% SME in cash)
- Funded Studentship: £30k-£45k (30% SME in-kind/cash)
- Energy Catalyst Rd 4: £50-£200k
- Collaborative R&D: £200k max (40% cash, 20% in kind)
- Funded Studentship: £30k-£45k (30% SME in-kind/cash)
- Knowledge Transfer Partnership: £150k (33% SME in cash)
- Innovation Voucher: £5k (50% SME in-kind)
Industry Engagement Fund

up to £20k

1 week approval

BDM helps with process
ETP Fund Application Process

1. Company applies for support
2. Company matched to academic
3. Elaboration of project
4. Application submitted to ETP
5. Contract
   - Or other funds (SFC, EU, InnovateUK etc) if more appropriate

Business Support Form referred to SE for review and internal assessment

Business Support Form approved by ETP ED & PM

Engagement Fund Application approved by ETP ED & PM

Project Delivery
**SME:** Medium wind installer

**Project:** to demonstrate novel geophysical techniques to explore foundation types and siting for wind turbines on sensitive and difficult terrain

**Partner:** Civil Engineering Department, Strathclyde University

**Staff:** Principal researcher, research assistant, and academic

Continuation from Encompass-funded project

**ETP financial support:** £5200, 25 man days over 3 months

**Impact:** Installer able to showcase survey technique to key customer.
Case Study - Bioenergy

**SME:** Small forestry-based business

**Project:** technical study into the optimum design for a pilot-plant anaerobic digestion facility complete with the new pre-treatment approach

**Partner:** Institute of Engineering & Energy Technologies at UWS

**Staff:** Principal Researcher, researcher, and research assistant

**ETP financial support:** £9900, 40 man days over 5 months
Achievements

- **101** Energy Industry Doctorates supported, £3M industry matched funding
- **546** SMEs in Low Carbon sector supported
- **160** low carbon innovation projects funded
- **29** Early Career Researchers and PhD students supported through the PECRE exchange programme