## PROVIDING A SUSTAINABLE SUPPLY OF QUALITY POWER ENGINEERING GRADUATES TO ENERGY INDUSTRY

<table>
<thead>
<tr>
<th>INITIATIVES</th>
<th>IMMEDIATE ACTIONS 2017/18</th>
<th>MEDIUM TERM ACTIONS (2-4 years)</th>
</tr>
</thead>
</table>
| 1. Actively promoting engineering in schools        | • Continued support of STELR Project in high schools and API Bursary Students Speaking at STELR Solar Car Challenge Schools  
• Coordination of bursary students to participating solar car challenge schools to be organised centrally by API  
• Pilot / Launch concept of Day in the Life Program targeting primary school (In conjunction with STELR) | • Investigate further industry support of ATSE STELR Program to promote power engineering to school students |
| 2. Delivering a successful bursary program to promote and market API and power engineering | • Continued provision of API Bursaries for up to 20 in 2017  
• Facilitate placement of API Bursary holders with member organisations for summer vacation placement through interview workshops in each State in September each year  
• API State coordinating groups (industry members and universities) actively supporting API Bursary Program  
• Link API Vacation Placement suggested skills and competency development document with API Bursary Vacation Employment Supervisor feedback | • Increase opportunities for bursary students to undertake vacation employment in renewable energy companies. |
| 3. Coordinating networking between industry, students and universities | • API to arrange state by state informal networking events between students recent graduates within industry and academics – 1 per year per state  
• API bursary awards to be interactive and engaging between bursary students and recent industry graduates  
• Implement an API web page for API Bursary students to “post” their final year projects/thesis in a poster format for all API members to access.  
• Continue facilitation of CIGRE NGN with API 3rd Year Bursary Students to provide coaching and guidance  
• Facilitate API student participation in local industry conferences (e.g. Australian Solar Council & Energy Storage Conference, EECON, & AUPEC) | • Survey members to collect information on provision of industry projects for final year students to undertake and assess if facilitation of this by API would be a value adding member service |
| 4. Increasing inclusion and diversity in power engineering | • Continued support of women early career academics  
• Leverage support of UQ Women in Engineering sponsorship to disseminate marketing processes and materials to other universities  
• Assist STELR Project with Government Grant to encourage girls into STEM subjects  
• Explore opportunities for indigenous and South Sea Islander Scholarships | • Conduct another Workforce Perceptions Survey to gauge the current inclusion and diversity perceptions |
## INITIATIVES

1. Aligning power engineering curriculum to position graduates for future career success and industry benefit
   - Work with academics to identify and develop new modules for access by all Australian Universities
   - Facilitate universities to share entrepreneurial and SME startup approaches and resources in their engineering programs
   - Undertake annual survey of University teaching, learning and curriculum.
   - Develop two new power engineering undergraduate modules based on renewable energy and storage

2. Bridging industry and universities to align common understanding of industry skills and priorities
   - Develop framework for cooperatively determining industry needs and university capability in power engineering education
   - Develop appropriate arrangements for continued support from Professor Simon Bartlett to assist API Innovation Project initiation and delivery
   - Facilitate University adoption of entrepreneurship in undergraduate courses

3. Offering a suite of professional development training courses relevant to industry
   - Promote and organise The API PowerChem conference May 2018
   - Organise API power engineering Summer School (Feb 2018) in Melbourne
   - Develop webinar Master Class series
   - Work with Australasian Transformer innovation Centre as Platinum Sponsor to provide industry value adding education (including syndicate at API future Summer Schools)

4. Supporting industry events/conferences and related forums
   - Sponsorship of TechCon, and Energy Storage Summit/Conference
   - Promote and participate in CIGRE, Electric Energy Society, and Energy Network Australia forums & conferences

## IMMEDIATE ACTIONS 2017/18

<table>
<thead>
<tr>
<th>INITIATIVES</th>
<th>IMMEDIATE ACTIONS 2017/18</th>
<th>MEDIUM-LONG TERM ACTIONS (2-4 years)</th>
</tr>
</thead>
</table>
| 1. Aligning power engineering curriculum to position graduates for future career success and industry benefit | • Work with academics to identify and develop new modules for access by all Australian Universities  
• Facilitate universities to share entrepreneurial and SME startup approaches and resources in their engineering programs  
• Undertake annual survey of University teaching, learning and curriculum. | • Develop two new power engineering undergraduate modules based on renewable energy and storage |
| 2. Bridging industry and universities to align common understanding of industry skills and priorities | • Develop framework for cooperatively determining industry needs and university capability in power engineering education  
• Develop appropriate arrangements for continued support from Professor Simon Bartlett to assist API Innovation Project initiation and delivery | • Facilitate University adoption of entrepreneurship in undergraduate courses |
| 3. Offering a suite of professional development training courses relevant to industry | • Promote and organise The API PowerChem conference May 2018  
• Organise API power engineering Summer School (Feb 2018) in Melbourne  
• Develop webinar Master Class series  
• Work with Australasian Transformer innovation Centre as Platinum Sponsor to provide industry value adding education (including syndicate at API future Summer Schools) | |
| 4. Supporting industry events/conferences and related forums | • Sponsorship of TechCon, and Energy Storage Summit/Conference  
• Promote and participate in CIGRE, Electric Energy Society, and Energy Network Australia forums & conferences | |
**COORDINATING INDUSTRY AND UNIVERSITY INNOVATION INITIATIVES**

<table>
<thead>
<tr>
<th>INITIATIVES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Implementing a r2D framework in collaboration with the energy networks association</td>
</tr>
<tr>
<td>2. Accessing university and industry partners capability to enable r2D framework</td>
</tr>
<tr>
<td>3. Delivering agreed innovation priority projects</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IMMEDIATE ACTIONS 2017/18</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provide secretariat function for Innovation Steering Group established to manage framework, process, funding, and project recommendations to API Board and ENA Asset Management Committee.</td>
</tr>
<tr>
<td>• Communication of r2D Initiative to key stakeholders (Industry, Government, Universities)</td>
</tr>
<tr>
<td>• Conduct annual review of University and/or research organisation capabilities.</td>
</tr>
<tr>
<td>• Develop appropriate arrangements for continued support from Professor Simon Bartlett to assist API Innovation Project initiation and delivery</td>
</tr>
<tr>
<td>• Facilitate delivery of six identified innovation priority issues and topics in 2017.</td>
</tr>
<tr>
<td>• Support for Innovation Steering Group to prioritise projects, develop business cases, report and monitor approved projects.</td>
</tr>
<tr>
<td>• Communicate innovation project successes and seek new projects from Industry.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEDIUM-LONG TERM ACTIONS (2-4 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Support Industry efforts for regulatory innovation factor similar to UK RIO regime.</td>
</tr>
</tbody>
</table>
### EXPANDING MEMBERSHIP & PROVIDING VALUE FOR MEMBERS

<table>
<thead>
<tr>
<th>INITIATIVES</th>
<th>IMMEDIATE ACTIONS 2017/18</th>
<th>MEDIUM-LONG TERM ACTIONS (2-4 years)</th>
</tr>
</thead>
</table>
| 1. Expand API membership aligned to the transformation of the energy industry | • Continue to Promote the Bursary Sponsorship offer to Australian Solar Council & Energy Storage Council members  
  • Continue to Research Renewables companies to identify engineering managers to target as potential API members  
  • Develop most effective mechanism to engage renewable organisations to determine the value propositions from API which would interest them to become API members. | • Engage with Clean Energy Council to identify potential API members                                                                                           |
| 2. Demonstrating API as value for members by delivering on API’s strategic plan objectives | • Increasing communications and developing closer relationships between member company CEOs  
  • Maintain Linkedin page to communicate current achievements and initiatives  
  • Increase contacts within communication database with members and non-members  
  • Maintain communication with monthly newsletters (Vision6)  
  • Undertake Workforce Planning Report 2017 and API Member representative API value survey |                                                                                                                                                                |
| 3. Extending reach of training into the Asia Pacific region                  | • Expand our contacts within Asia Pacific region  
  • Promote API initiative & offerings in Asia Pacific region                                                                                                    | • Consider development of Asia Pacific focused continuing professional development program. E.g. webinars, master classes, work exchanges, Summer School attendance. |

---

1. **Expand API membership aligned to the transformation of the energy industry**
   - Continue to Promote the Bursary Sponsorship offer to Australian Solar Council & Energy Storage Council members
   - Continue to Research Renewables companies to identify engineering managers to target as potential API members
   - Develop most effective mechanism to engage renewable organisations to determine the value propositions from API which would interest them to become API members.

2. **Demonstrating API as value for members by delivering on API’s strategic plan objectives**
   - Increasing communications and developing closer relationships between member company CEOs
   - Maintain Linkedin page to communicate current achievements and initiatives
   - Increase contacts within communication database with members and non-members
   - Maintain communication with monthly newsletters (Vision6)
   - Undertake Workforce Planning Report 2017 and API Member representative API value survey

3. **Extending reach of training into the Asia Pacific region**
   - Expand our contacts within Asia Pacific region
   - Promote API initiative & offerings in Asia Pacific region