



**Off-Grid Systems and New Technology Training
21-24 November 2016
Victoria and Tasmania, Australia**

Program of Activities

20 November 2016 (Sunday)		
Day 1	Activity	Remarks
	Arrival of CAREC participants Welcome to Australia! Please see attached documents regarding the logistical arrangements and detailed information regarding this training. (There may be additional information available at the reception desk for delegates at check-in)	Oaks on Collins Hotel 480 Collins St, Melbourne
7:00 PM-9:00 PM	Dinner	Venue to be announced



21 November 2016 (Monday)		
Day2	Activity	Remarks
7:00 AM-8:30 AM	Breakfast in Oats on Collins	
8:30AM-8:40AM	Leave for Tesla Office Assemble in the hotel lobby and leave for Tesla office at 8:40AM sharp. Delegates will leave by rented taxi.	
9:00 AM-11:00 AM	<p>Electric Vehicles by Tesla Australia Presenter: Mr. Tim McBride</p> <p><i>Objective:</i></p> <ul style="list-style-type: none"> - <i>to understand how electric cars compare with traditional internal combustion engine cars and its charging options from the power grid</i> - <i>the demonstration will include Tesla Power Wall, the Tesla's home battery system</i> <p>Tesla Motors was founded in 2003 by a group of engineers in Silicon Valley who wanted to prove that electric cars could be better than gasoline-powered cars.</p>	
11:30AM-12:30PM	Lunch	
12:30PM-3:40PM	<p>Energy Sector Coordinating Committee (ESCC) Meeting</p> <ul style="list-style-type: none"> • ESCC Meeting Agenda • Energy Investment Forum 2 • Proposed Concept Note: RETA on the use of Battery for RE • RETA on Leapfrogging • Work Plan for 2017 • CAREC Strategy for the next five years • ESCC and Climate Change • ESCC Updates <p>Presenter: <i>Mr. Sohail/ Hasnie,</i> <i>Principal Energy Specialist, ADB</i></p> <ul style="list-style-type: none"> • Presentation <p>Presenter: <i>Mr. Adam Hammond</i> <i>CEO, Bluetech Capital</i></p> <ul style="list-style-type: none"> • Bright Beam Solar <p>Presenter: <i>Mr. James Fraser</i> <i>CEO, Bright Beam Solar Pfy. Ltd.</i></p>	



21 November 2016 (Monday)		
Day2	Activity	Remarks
3:40PM	Leave for Australia Regulatory Office Level35 The Tower 360 Elizabeth Street Melbourne Central	
4:00 PM-5:00 PM	<p>Regulatory Issues Presenter: <i>Mr. Chris Pattas</i> <i>GM Network Pricing, Policy and Compliance</i> <i>Australia Energy Regulator (AER)</i></p> <p><i>Topics to be discussed:</i></p> <ol style="list-style-type: none"> <i>1. General discussion on the different regulatory agencies and their role in managing the wholesale market;</i> <i>2. Concept of retail contestability- unbundled price and consumer related choice; and</i> <i>3. Renewable energy, energy innovation and their impact on the incumbent utilities.</i> <p>The Australian Energy Regulator (AER) regulates energy markets and networks under national energy market legislation and rules.</p> <p>More details at www.aer.gov.au</p>	
6:00-7:30PM	Dinner	



22 November 2016 (Tuesday)		
Day3	Activity	Remarks
5:30AM	Check Out at Oaks on Collins	Early check-out is required to allow sufficient time for coach to load luggage.
5:30AM-6:10 AM	Breakfast at Oaks on Collins	Breakfast is provided by the hotel.
6:20AM-7:15AM	Transfer from Oaks on Collins to Essendon Airport	Please assemble at the hotel lobby by 6:20AM. Bus will leave at 6:30AM. Late comers will be left behind. We need to be at the airport 45 minutes prior to flight schedule.
8:00AM-9:00AM	Flight from Essendon Airport to Flinders Island	
9:00AM-9:15AM	Coach Transfer from Flinders Island Airport to Flinders Island Power Station	
9:15AM-11:45AM	<p>Principles of Remote Area Power Planning and Case Study Tour of Flinders Island Hybrid Energy Hub</p> <p><i>Flinders Island Hybrid Energy Hub aims to use a combination of solar, wind, diesel, storage and enabling technologies to displace more than 60% of Flinders Island's diesel generated energy. Hydro Tasmania will develop a modular hybrid energy solution with the potential to further drive down costs and move a step closer to delivering a commercially competitive product. Total project costs is AUD12.BM</i></p> <p>Source: http://www.illarena.gov.au/projects/flinders-island-hybrid-energy-hub/</p>	
11:45AM-12:15PM	Lunch	
12:15PM-	Transfer from Flinders Island Power Station to Flinders	



12:30PM	Island Airport
12:30PM-1:30PM	Flight from Flinders Island to King Island
1:30PM-2:00PM	Transfer from King Island Airport to King Island Power Station
2:00PM-4:30PM	<p>Case Study and Tour of King Island Renewable Energy Integration Project (KIREIP)</p> <p><i>The recently completed KIREIP's main goal is to increase renewable energy generation and reduce dependence on fossil fuels. KIREIP gives a glimpse of the possible future of renewable energy with enabling and storage technologies in a hybrid off-grid power system. The project will also contribute to the development of renewable energy for the wider Australian National Electricity Market.</i></p> <p>Source: http://www.kinaislandrenewableenerav.com.au/</p>
4:30PM-5:00PM	Transfer from King Island Power Station to King Island Airport
5:00PM-5:30PM	Flight from King Island to Smithton
5:30PM-5:45PM	Transfer from Smithton Airport to Tall Timbers Hotel
5:45PM	Check in at Tall Timbers Hotel
7:00PM	Dinner at Tall Timbers Hotel



23 November 2016 (Wednesday)		
Day4	Activity	Remarks
7:00AM-8:00AM	Breakfast at Tall Timbers Hotel	
8:00AM-8:15AM	Check out at Tall Timbers Hotel	
8:15AM-9:00AM	Transfer from Tall Timbers Hotel to Woolnorth Wind Farm	
9:00AM-10:00AM	<p>Woolnorth Wind Farm Tour</p> <p><i>Woolnorth owns and operates three wind farms in Tasmania. These farms take advantage of the world class wind resources that we are exposed to in Tasmania.</i></p> <p><i>Today the Woolnorth Wind Farms- Bluff Point, Stud and Bay and Musselroe generate approximately 9 percent of Tasmania's electricity needs and employ directly and indirectly in excess of 40 people to support the operation of the wind farms.</i></p> <p>Source: www.woolnorthwind.com.au</p>	
10:00AM-11:30AM	Transfer from Woolnorth Wind Farm to Burnie	
11:30AM-12:00NN	Pre-packed Lunch for the participants	
12:00NN-12:45PM	Transfer from Burnie to Paloona Hydro Power Station	
12:25PM-2:15PM	<p>Paloona Hydro Power Station Tour</p> <p><i>The power station uses water stored in Lake Paloona. It is the last power station in the Mersey-Forth catchment before it flows out to sea. It was commissioned in 1972 with a generating capacity of 30 MW</i></p> <p>Source: http://www.hlf.dro.com.au/energyfour-e-ower-stations/mersev-forth</p>	
2:15PM-6:45PM	Transfer from Paloona Hydro Power Station to Hobart	
6:45PM-7:00PM	Check in at The Grand Chancellor Hobart	
7:00PM	Dinner	



24 November 2016 (Thursday)		
Day5	Activity	Remarks
7:00AM-8:00AM	Breakfast at The Grand Chancellor Hobart	
8:00AM-8:15AM	Check out at The Grand Chancellor Hobart	
8:15AM-10:00AM	<p>Meeting with Hydro Tasmania</p> <p><i>Hydro Tasmania is Australia's leading renewable energy business. It generates hydropower and wind power in Tasmania and trade electricity and energy-related environmental products (such as Renewable Energy Certificates) in the Australian market.</i></p> <p><i>Hydro Tasmania is the largest water manager in Australia. It owns and operates an advance hybrid power system on King Island. It uses wind, solar, diesel and innovative energy enabling technologies to maximize renewable energy use. Hydro Tasmania is owned by the Government of Tasmania and currently employs over 1100 people. Asset worth is estimated to be around \$5 billion.</i></p> <p>Source: www.hlf.dro.com.au</p>	<p>Hydro Tasmania Meeting Room 4 Elizabeth Street Hobart Tasmani</p>
10:00AM-10:30AM	Transfer to Hobart Airport	
11:00AM-12:56PM	Flight to Canberra	
1:00PM-2:00PM	Transfer from Canberra Airport to ITP Renewables Office	
2:00-5:00PM	<p>ITP Renewables</p> <p><i>ITP Renewables is an established renewable energy consulting company, working on projects of all sizes for governments, corporations, aid agencies and energy providers.</i></p> <p><i>Currently, the house a facility for the ARENA-funded Lithium /on Battery Test Centre. The Centre compares various lithium-ion battery chemistries and products available in the Australian market against claims made by manufacturers. Tested under Australian conditions, the results of the Centre will provide consumers with independent information on battery performance.</i></p> <p>Source: http://www.itoau.com.au</p>	<p>ITP Renewables Office Suite 1, Level 1 19 Moore St Turner, Canberra ACT 2612</p>
5:00PM-6:00PM	Transfer from ITP Renewables Office to Canberra Airport	
6:00PM-7:03PM	Flight from Canberra to Essendon Airport	



24 November 2016 (Thursday)		
Day5	Activity	Remarks
7:03PM-7:30PM	Transfer to Tullamarine Airport	
7:30PM-9:00PM	Dinner and Wrap-Up Meeting	TBA
9:00PM onwards	Flight back to home countries	