ETN'S 16TH ANNUAL GENERAL MEETING & WORKSHOP
DRAFT AGENDA

18-19 March 2020
Shell Technology Centre Amsterdam
Grasweg 31, Amsterdam, Netherlands

WEDNESDAY 18 MARCH 2020 - Annual General Meeting	
Morning	ETN Board and Project Board meetings
11:00 – 13:00	Registration at Shell Technology Centre Amsterdam
12:00 – 13:00	Welcome lunch
13:00 – 15:00	**Opening and President's speech,** Bernard Quoix, ETN President/TOTAL **Approval of the previous AGM minutes** **Annual report of the activities and achievements,** Christer Björkqvist, Managing Director, ETN • Energy & climate policy and market trends • ETN Working Groups, projects and activities • Upcoming meetings and events **Strategy and way forward,** ETN Board **Financial report,** Andy Williams, ETN Treasurer/Chromalloy **Adoption of accounts** **Discharge of ETN Board 2018-2020** **Voting session: ETN Board election 2020-2022**
15:00 – 15:40	Coffee break
15:40 – 17:40	**Research and innovation challenges for gas turbines in a low-carbon world** *Chaired by Peter Jansohn, Paul Scherrer Institute, Chairperson of ETN Project Board* • **European Research & Innovation Strategy – Horizon Europe** Eric Lecomte, Policy Officer, Director General for Energy, European Commission • **Carbon Removal and Return – Can it help?** Laurent Mariac, CO_2 Capture Leader for Power Gen. and Cement, Research & Development, TOTAL • **Shell Research & Innovation Programme for a low carbon society** Wilfried Maas, Shell • **Research & Innovation Programme from a Utility Perspective** Tbc **Announcement and presentation of the newly elected Board** **AGM closing remarks,** Christer Björkqvist, Managing Director, ETN
17:40 – 18:00	Gathering of the newly elected Board
18:00	Networking drink
19:30	Dinner at restaurant BAUT (Spaarndammerstraat 460, Amsterdam)

THURSDAY 19 MARCH 2020 - Workshop				
	Topics for Technical Committee 1: **Next generation power cycles** *Chaired by Marco Ruggiero, External Funding & Technology Development, Baker Hughes*	**Topics for Technical Committee 2:** **Gas turbines operational and fuel flexibility** *Chaired by Peter Kutne, Head of Department Gas Turbine, DLR*	**Topics for Technical Committee 3:** **Additive manufacturing and new materials** *Chaired by John Oakey, Professor of Energy Technology, Cranfield University*	**Topics for Technical Committee 4:** **Condition monitoring and asset management** *Chaired by Chris Dagnall, General Manager, DNV-GL Energy*
8:30–10:30 Parallel TC* sessions	**ETN sCO_2 advisory committee** *Marco Ruggiero, External Funding & Technology Development, Baker Hughes* **ETN sCO_2 deployment in the heavy industry study** *Ambra Giovannelli, Professor thermodynamic and Fluidodynamic, University of Roma Tre* **Thermal energy harvesting** *Piero Colonna, Professor Propulsion and Power, Delft University of Technology* **Innovative MGTs for industrial applications** *Tony Hynes, Commercial Director, Aurelia Turbines* **MGTs for single households** *Eleni Agelidou, Scientist, DLR*	**ETN Hydrogen Gas Turbines report** *Peter Kutne, Head of Department Gas Turbine, DLR* **Ammonia for gas turbines fuelling** *Agustin Valera Medina, Associate professor, Cardiff University* **First outcomes of H2020 PUMP HEAT Project: optimized solution for EU Combined Cycle flexibility** *Stefano Barberis, Project Manager, RINA-C* **Roadmap to CO_2 free flexible power** *Jeffrey Haspels, Project Manager, Vattenfall and Peter Stuttaford, CEO, Ansaldo Thomassen* **ETN initiative for the EU Innovation Fund**	**The use of composite material in gas turbines components** *Daniel Mack, Team Leader "High-Temperature Protective Coatings", Jülich Research Center* **Perspective about the deployment and the implications potential of NEXTOWER materials for applications in high temperature CSP and CO_2** *Antonio Rinaldi, Giuseppe Barbieri, ENEA* **Additive Manufacturing** *Jan de Roos, Shell* **Additive Manufacturing Research Roadmap for the energy sector** *Ferenc Pankotai, Manager, Combustion Engineering and Additive Manufacturing, Solar Turbines* **ETN AM Equipment Benchmarking Initiative** *Vladimir Navrotsky, Chief Technology Officer, Siemens*	**Safety requirements for hydrogen gas turbines** *Stefano Rossin, Chief Engineering Office Manager, Baker Hughes* **Oil requirements for the operation of gas turbines** *Dave McCormack, Shell* **Requirements for the installation of electrolyser in gas turbines** **ETN study on gas turbine component life assessment**
10:30–11:00 Coffee break				
11:00–12:30 Parallel TC* sessions				
12:30–13:30 Lunch break				
13:30–15:00 Parallel TC* sessions				
Plenary session				
15:00 – 16:00	**Report from the TC Chairs on actions and closing remarks** *Technical Committee Chairpersons*			

* *TC: Technical Committee*

Sponsor

Shell

Accommodation

Room Mate Aitana
IJDok 6, 1013 MM, Amsterdam, Netherlands

NH Amsterdam Noord
Distelkade 21, 1031 XP, Amsterdam, Netherlands

Park Plaza Victoria Amsterdam
Damrak 1-5,1012 LG, Amsterdam, Netherlands

Venue

Shell Technology Centre Amsterdam (STCA)
Grasweg 31
1031 HW, Amsterdam, Netherlands

Dinner

Restaurant BAUT
Spaarndammerstraat 460, Amsterdam

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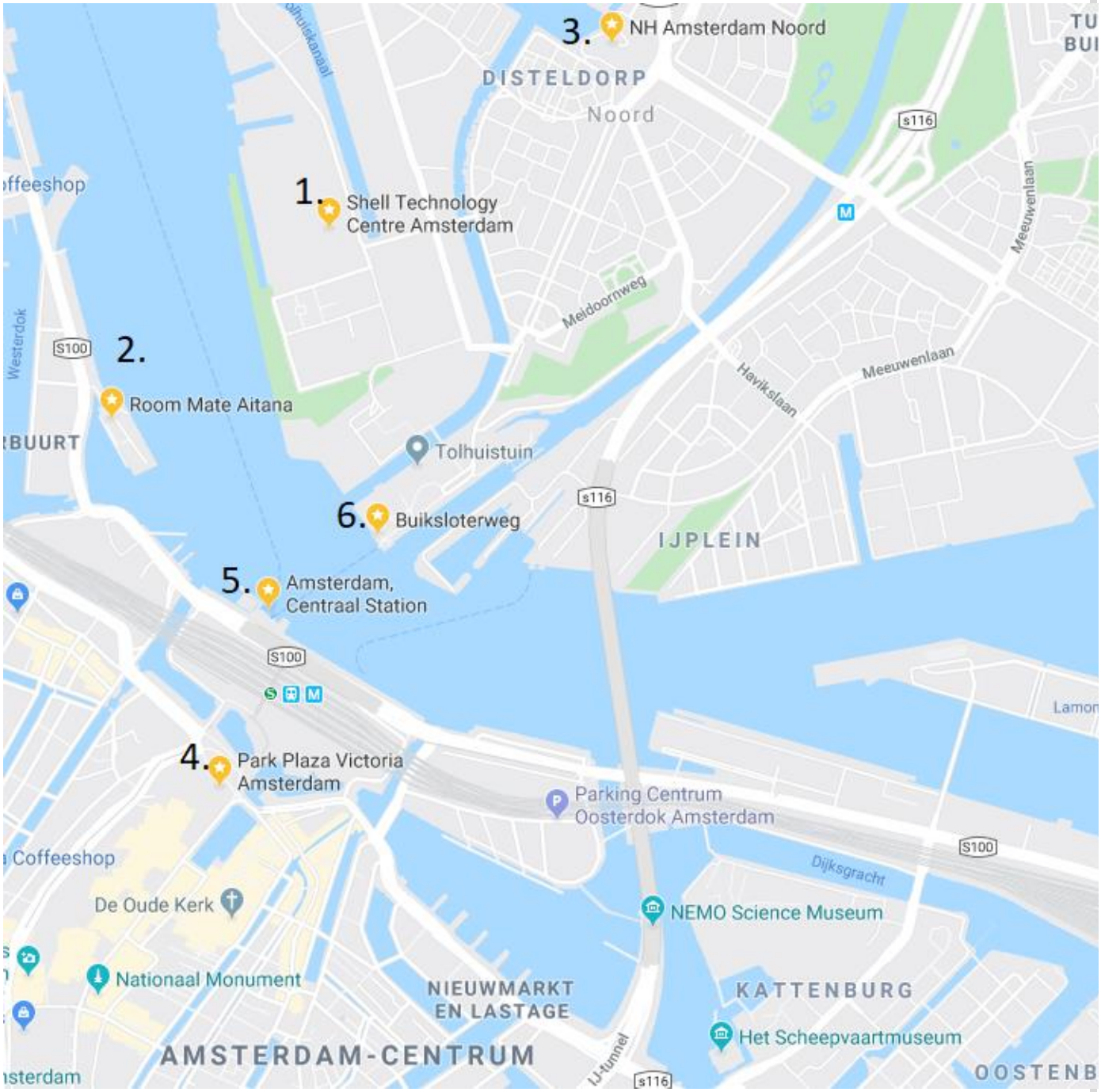
Directions

Shell Technology Centre Amsterdam is located on the north side of Amsterdam, and can be easily accessed by ferry from Amsterdam Centraal railway station (stop for international, regional and airport trains).

Room Mate Aitana and Park Plaza Victoria hotels are situated in close proximity to Amsterdam Centraal. NH Amsterdam Noord hotel is located on the north side of Amsterdam, close to Shell's facilities, and provides on-spot parking with a daily fee.

Please note that Shell Technology Centre cannot reserve parking for the AGM & Workshop attendees. We would advise to leave your car at your hotel.

Map



1. Shell Technology Centre Amsterdam – meeting venue
2. Room Mate Aitana hotel
3. NH Amsterdam Noord hotel
4. Park Plaza Victoria hotel
5. Amsterdam Centraal railway station and ferry terminal (ferry number 901)
6. Buiksloterweg ferry terminal (ferry number 901)

Ferry

Directions from Amsterdam Centraal railway station to Shell Technology Centre: take the ferry number 901 to Buiksloterweg (free of charge)

Directions from Shell Technology Centre to Amsterdam Centraal: walk to Buiksloterweg ferry terminal and take the ferry number 901 to Amsterdam Centraal (free of charge)