



Oslo Educational Trip - Renewable Energy Initiatives 12-15 September 2019

Welcome to Oslo with Commodity Club

The Commodity Club Switzerland hereby kindly invites you to join us on our trip to Oslo on September 12th-15th, 2019. The 4-day trip will give you insights into the energy sector as well as the rich culture of Norway.

The Commodity Club Switzerland aims to foster **know-how exchange and education** on commodity markets. With this educational trip, we intend to give commodity experts an exclusive insight into the **alternative energy business** in an other country (Norway), a leader in the sector.

Through our network, we have sourced intesting slots for this Norwegian trip: have a look in the following pages.

This is our third <u>educational trip</u>, after the first one in **Kiev (Agricultural insights** into Ukraine in 2017) and the second one in the **Alentejo region of Portugal**, in 2018 (please find <u>here our report</u>). We received very positive feedback from our members, who **enjoyed both trips very much**.

For this trip, we have a maximum of 20 participants.

We look forward to travelling with you! Register soon! Peter Sigg, President of the Commodity Club The Oslo organizing Committee: Charles, Olga, Francesca

Program and Details

12 September (Thursday)

- Zurich outbound flight departure time at 13:40 or at 16:35
- 20:00 Norwegian Lobster Dinner
- 21:30 Oslo Bar hopping

13 September (Friday)

- 09:00 Biogas waste-to-energy plant field visit
- 12:00 Fine Norwegian Crab Lunch
- 14:00 Siemens Gamesa wind power energy company visit
- 16:00 Oslo City Hall presentation: Oslo European Green Capital 2019
- 18:30 Fine Norwegian Crayfish dinner
- 20:30 Oslo Bar hopping

14 September (Saturday)

- 09:00 Det Norske Veritas company presentation
- 12:00 Oslo Nature Walks: Island Hopping Tour
- 19:00 Oslo Fjords Evening Buffet Cruise
- 22:00 Oslo Bar hopping

15 September (Sunday)

- Oslo outbound flight - departure time 11:45

Cost estimate (indicative)

- Flight: Zurich Oslo Zurich (to be booked separately by each participant) Approx. CHF 250 (direct flight)*
- Accommodation Oslo City approx. CHF 532 /person overall for 3 nights

Total indicative fix costs: CHF 900.- (excluding food & beverage and extra tours)

Registration

Via e-mail:	<pre>contact@commodityclub.ch</pre>
Deadline:	20 August 2019

Meeting point

Zurich Airport, departure gate

* prices/rates as of 11 August 2019

Oslo Green City – Waste-to-Energy Agency

Food waste in the green bags is sent to EGE's biogas plant to be processed into biogas and biofertilizer. The residual waste from the household sorting is used as energy in the district heating grid. Waste sorting is done with the aid of a fully automated optical sorting process for source separated household waste, prepacked into bags with specified colours. The incinerators are filled with residual waste, heat water pipes surrounding the incinerator. The heated water is then transported through the grid, providing the households with eco-friendly warm water. This eco-friendly biogas is used to fuel buses and waste trucks, while biofertilizer is used in agriculture. A full green bag of food waste can provide enough fuel to transport a bus as far as 250 metres!

Focus: visit to the biogas plant Oslo City presentation: Oslo European Green Capital 2019 **Logistics**: Oslo City Hall (Oslo Downtown) + Vormsund plant

Date: 13/09/2019 Time: 9:00 – 11:00 biogas plant 16:00 Oslo City Hall Address: Vormsund and Oslo City Hall Website: www.greencapital2019.com



City of Oslo Waste-to-Energy Agency

OPTICAL SORTING OF HOUSEHOLD WASTE

Siemens Gamesa Wind Power Energy

From the very first wind generators to the world's largest wind farms: Siemens Gamesa pioneered a whole new industrial sector, and currently supplies wind turbines with 208 MW total capacity for one of Norway's largest wind park.

We will meet Ben Bjoerke, CEO Siemens Gamesa Renewable Energy. He will present:

- Introduction to the Norwegian wind power market,
- Siemens Gamesa in Norway,
- Turbine technology at a glance,
- Wind power on its way to grid parity,
- What's next? Offshore wind opportunities and challenges.

Focus: Wind power technology company visit **Logistics**: Oslo City

Date:13/09/2019Time:14:00-16:00Address:Østre Aker vei 88, 0596 OsloWebsite:www.siemensgamesa.com





Det Norske Veritas (DNV)

Det Norske Veritas (DNV) provides life, property, and environment safety services.

The Company manages risk and also establishes rules and guidelines for the classification of ships, mobile offshore platforms, fixed offshore structures, and other floating marine structures.

Focus: Global Sulphur Cap 2020 implementation. The bunker fuel supply and availability landscape will change when the IMO's regulation capping the global fuel sulphur limit at 0.50% is enforced from 1 January 2020. **Logistics**: Oslo City or DNV offices (tbd)

Speaker: Stine Mundal, Project Manager Approval DNV GL – Maritime.

Date: 14/09/2019 Time: 09:00 Website: www.dnvgl.com







Dining Events

Friday Lunch Fine Dining

Oslo Aker Brygge area



There is plenty of choice for gourmet Friday lunch dining in the city center – venue to be confirmed closer to the date.

<u>Olivia Aker</u> <u>Lofoten Fiskerestaurant</u> <u>Rorbua Aker Brygge</u> <u>Louise Restaurant</u>

Saturday Oslo Fjords 3-Hour

Evening Buffet Cruise



Climb aboard a wooden sailing ship for a 3-hour cruise of the Oslo fjords. Pass a maze of green islands, sit back and enjoy the cinematic scenery. Savor the fresh flavor of fjord shrimps at a dinner buffet with hot and cold drinks from the bar.

<u>Fjords</u>

Saturday Evening Out

34th + Oslo Aker Brygge area



There is plenty of choice, venue to be confirmed closer to the date accordingly with the group tastes and interests.

www.34th.no

Sightseeing

Oslo has a lot to offer from the cultural & natural side. For example, the **Oslo Nature Walks: Island Hopping Tour (Link)** discovers Oslo's world-class coastal scenery on a 4-hour island hop: 3 of the city's best-preserved islands and sites that vary from the ruins of a 1000-year-old abbey to small summer seaside villages, hidden beaches and sea cliffs.

The Nordic capital is holding special spirit uniting the unique Viking heritage combined with modern technology savvy infrastructure. We are right about gathering special ideas to be able to surprise you while still attending for the final participants list to agree the program according to the preference of the peers.



Accommodation

First Hotel Grims Grenka: we have evaluated the best hotel in terms of comfort, price and location, and got attractive rates thanks to the network of one of our members. The price for a single room for 3 nights is approx. 532.- CHF. Alternative privately reserved forms of accommodation are allowed, but not recommended/preferred as we would like to have all participants close together.



Welcome to Join us

Kindly provide your confirmation by 20 August 2019 for the best planning.

The registration is binding.

Oslo Organizing Committee:

Charles King

Olga Doktorova

Francesca Camilla Bruno

contact@commodityclub.ch



Enjoy Oslo together with Commodity Club this year!