



Advancing Entrepreneurship and Start-up Initiatives for Sustainable Chemistry: Learning from Case Studies

Organized by UN Environment and the International Sustainable Chemistry Collaborative Center (ISC₃), hosted by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), in partnership with the United Nations Industrial Development Organization (UNIDO), the German Chemical Society, the Freie Universität Berlin and the United Nations Institute for Training and Research (UNITAR)

14 September 2017, Berlin, Germany

Information Note

Summary

UN Environment and the International Sustainable Chemistry Collaborative Center (ISC₃), in partnership with the United Nations Industrial Development Organization, the German Chemical Society and Freie Universität Berlin, are organizing a one-day case study workshop to advance entrepreneurship and start-up initiatives for sustainable chemistry. The workshop will take place on 14 September 2017 in Berlin, Germany. It is organized back to back with other events taking place on 12-13 September 2017 in the context of the 150th Anniversary of the German Chemical Society, including an 'Innovation Marathon'.

1. Background and Context

Global momentum around the concept of sustainable chemistry is growing. In 2016, the concept was recognized for the first time by the United Nations Environment Assembly and work has commenced at the global level to identify best practices. Important measures to advance sustainable chemistry are being taken by governments, the private sector, intergovernmental organizations, the research community and civil society. They include, for example, the launch of the International Sustainable Chemistry Collaborative Center (ISC₃) in Germany, or the adoption of sustainable chemistry policies and substitution initiatives by chemical companies and retailers.

An important dimension of sustainable chemistry is to scale up research, innovation and entrepreneurship to develop new and safer chemicals and production processes that significantly reduce negative impact of hazardous chemicals currently on the market. Start-up initiatives and companies can be a strong driver to nurture momentum towards sustainable chemistry, and help close the gap between science, innovation and business application. Yet, while certain sectors, such as the IT sector, are known for a thriving start-up scene, start-up initiatives in area of green and sustainable chemistry are less developed. One reason for this, amongst others, may be the need to put in place a

sophisticated laboratory infrastructure, as well as related financing needs.

One of the topics pursued by the Global Chemicals Outlook-II, mandated by United Nations Environment Assembly (UNEA) in 2016, is to collect state-of-the-art knowledge and identify determinants which may advance (or impede) innovation to advance sustainable chemistry, including through start-up companies. Also in 2016, the United Nations Environment Assembly invited countries, international organizations and other interested stakeholders, including the private sector, with relevant experience with the issue of sustainable chemistry, to submit best practices in 2017, indicating how these may enhance the sound management of chemicals.

2. Goal and Objectives

The overall aim of the workshop is to advance at international level in scaling up innovation for sustainable chemistry and identify opportunities for action in this area. By bringing together green and sustainable chemistry entrepreneurs from developed and developing countries, together with other relevant experts, the workshop will present and review case studies with the goal to identify lessons learned and generate policy relevant knowledge. Workshop outcomes will feed into UN Environment's work on the update of the Global Chemicals Outlook in 2018, and other possible activities at the international level organized by UN Environment, the ISC₃, and other partners.

Specific objectives of the workshop include:

1. to explore the momentum around sustainable chemistry and to share insights from the Innovation Marathon;
2. to gain an understanding of different sustainable chemistry start-up initiative and elicit determinants of their success and challenges;
3. to identify, for key identified determinants, opportunities and solutions to advance sustainable chemistry start-up initiatives and their strengthen the enabling environment; and
4. to exchange ideas for future activities at the global level to advance entrepreneurship and sustainable chemistry start-up initiatives.

3. Programme and Methodology

The workshop will use a case study approach and include interactive panel discussions and small working groups. Participants will have the opportunity to share their start-up case studies in the field of green and sustainable chemistry. Case studies will be discussed in an open and interactive manner in order to extract insights and lessons learned. They will feature both initiatives that are already successfully operationalized and may include concepts still under development.

The one-day workshop will include the following sessions:

- *Session 1: The context for sustainable chemistry*
- *Session 2: Sustainable chemistry start-up initiatives: A snapshot and knowledge sharing on case studies*
- *Session 3: Extracting determinants of success and generating policy insights*
- *Session 4: Identifying opportunities for further work and follow-up*

For additional information, please see the draft agenda.

4. Participants

The Workshop will bring together approximately 27 participants, including entrepreneurs leading (or supporting) sustainable and green chemistry start-up initiatives as well as international experts and representatives of international organizations. Entrepreneurs participating in the workshop and presenting their start-up initiatives as well as lessons learned were selected based on a brief statement of interest submitted to UN Environment.

For additional information, please see the list of participants.

5. Presentation of Case Studies

Entrepreneurs will have a slot of 7 minutes on one of three consecutive panels (Session 2) to present, in a 'lightning talk', key insights from their case and lessons learned that may be relevant for other entrepreneurs, policy makers and the international community through. This may include a brief, no more than 1-2 minutes, introduction of how the initiative contributes to sustainable chemistry. Each presentation will be followed by 2-3 minutes for questions and answers. The insights from the case studies will inform the content of parts of the second Global Chemicals Outlook (GCO-II) dealing with sustainable chemistry.

For additional information, please see the compilation of case studies.

6. Back to Back Events

Innovation Marathon – Open Sessions

The workshop is organized back-to-back with a series of events around the 150th anniversary of the German Chemical Society, including an 'Innovation Marathon', which will take place on 12-13 September focusing mainly on the national situation, while recognizing the international context. All participants are invited to attend the public sessions during the mornings of Tuesday (10h30-12h00) and Wednesday (10h30-13h30). These will take place in Lecture Hall 101 of the School of Business and Economics ("Wirtschaftswissenschaft") of the Freie Universität Berlin (see logistics below). Those wishing to go in a group can meet in the lobby at 09:30 on Tuesday and Wednesday morning (a

representative of UNITAR/UN Environment will be present to lead to the venue).

Innovation Marathon – Closed Sessions

Slots have been secured for interested participants for the closed session of the innovation marathon, which will take place from Tuesday afternoon until Wednesday at noon. Relevant information is being provided by the organizers.

Start-up fair and get-together

On Wednesday, 13 September, 13:30-15:00, the Freie Universität Berlin is organizing a start-up fair and get-together, during which interested entrepreneurs may give short pitches and present their initiatives to the interested audience. Those who voiced interest are being contacted directly. This event will take place in the lobby of the School of Business and Economics ("Wirtschaftswissenschaft") of the Freie Universität Berlin.

Informal Dialogue on Global Chemicals Management Policy Framework and the GCO-II

On Wednesday, 13 September, 15:30-17:00, we are providing an opportunity for an informal dialogue on the global chemicals management policy framework and the update of the GCO-II. This open session will take place in Room 105 of the School of Business and Economics ("Wirtschaftswissenschaft") of the Freie Universität Berlin.

7. Partners

The workshop is jointly organized by UN Environment, Economy Division, Chemicals and Health Branch, and the International Sustainable Chemistry Collaborative Center (ISC3), *hosted by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)*, in partnership with the United Nations Industrial Development Organization (UNIDO), the German Chemical Society, the Freie Universität Berlin and the United Nations Institute for Training and Research (UNITAR).

8. Logistics

Workshop venue:

The workshop will take place on Thursday, 14 September, in [Hotel Berlin, Lützowplatz 17, 10785 Berlin](#) (see transport below for additional information) in Room Montreal. Registration will start at 08:00. The workshop will close at approximately 17:30.

Accommodation:

Most participants are staying at the [Novum Hotel Aldea Berlin Zentrum, Bülowstr. 19-22, 10783 Berlin](#).

Transport:

Information on local transport can be found in the Annex.

Pre-workshop Dinner:

On Wednesday, 13 September, all participants will be invited for a dinner. The dinner will take place at 19:00 at the Café Einstein Stammhaus, Kurfürstenstraße 58, 10785 Berlin. We will meet in the lobby of the Novum Hotel Aldea Berlin Zentrum at 18:45.

Overview of events, venues and time:

Event	Venue	Time
Innovation Marathon – Open Sessions	Freie Universität Berlin, School of Business and Economics, ("Wirtschaftswissenschaft"), Lecture Hall 101	Tuesday, 12 September, 10h30-12h00 and Wednesday, 13 September, 10h30 – 13h30
Innovation Marathon – Closed Sessions	Freie Universität Berlin, School of Business and Economics, ("Wirtschaftswissenschaft"), Lecture Hall 101, 102 and 103	Tuesday, 12 September, 12h00 – Wednesday, 13 September, 12h00
Start-up fair and get-together	Freie Universität Berlin, School of Business and Economics, ("Wirtschaftswissenschaft"), Lobby	Wednesday, 13 September, 13h30 – 15h00
Informal Dialogue on the global chemicals management policy framework and the Global Chemicals Outlook	Freie Universität Berlin, School of Business and Economics, ("Wirtschaftswissenschaft"), Room 105	Wednesday, 13 September, 15:30-17:00
Dinner	Café Einstein Stammhaus, Kurfürstenstraße 58, 10785 Berlin	Wednesday, 13 September, 19:00
Advancing Entrepreneurship and Start-up Initiatives for Sustainable Chemistry: Learning from Case Studies	Hotel Berlin, Lützowplatz 17, 10785 Berlin	Thursday, 14 September 08:00 – 17:30

Contact persons:

For any questions you may have, please contact Mr. Jost Dittkrist (jost.dittkrist@unitar.org) and Ms. Svetlana Silova (Svetlana.silova@giz.de). For urgent issues, please call Mr. Jost Dittkrist at +41 78 695 36 28.

Annex: Transport

The subway, tram and train network of Berlin can be found here:

http://www.berlin-airport.de/de/_dokumente/reisende/2016-11-u- s-bahn-berlin.pdf

Transport from Berlin Tegel Airport to the Hotel:

Participants can either choose to take a taxi directly from the airport (designated area at Gates 6 to 9 of Terminal A as well as at Terminals C and E; ca. 20-30 minutes) or use the public transport system (ca. 25-35 minutes). Public transport from Berlin Tegel Airport to the hotel is cheap and very fluent. The following options exist, among others:

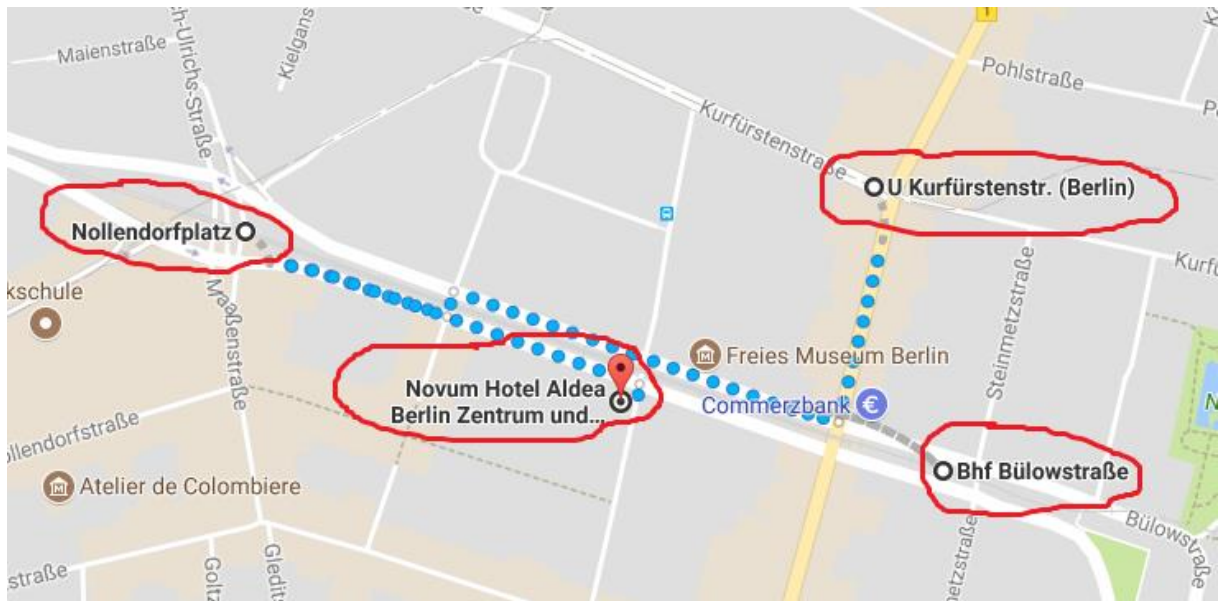
- Bus X9, direction 'S+U Zoologischer Garten' until 'Ernst-Reuter-Platz' → switch to U2, direction 'S+U Pankow', until 'Bhf Bülowstraße', then walk 200 meters.
- Bus X9, direction 'S+U Zoologischer Garten' until 'U Uhlandstr.' → switch to U1, direction 'S+U Warschauer Str.', until 'Nollendorfplatz, then walk 400 meters.

Transport from Berlin Schönefeld Airport to the Hotel:

Participants can either choose to take a taxi directly from the airport (designated area in front of Terminal A; ca. 30-40 minutes) or use the public transport system (ca. 50 minutes). For public transport, the following options exist, among others:

- Train RB14 direction 'Nauen, Bahnhof' or train RE7, direction 'Dessau, Hauptbahnhof' until 'Alexanderplatz' → switch to subway U2, direction 'Theodor-Heuss-Platz' until 'Bhf Bülowstraße', then walk 200 meters.
- Tram S45, direction 'S Südkreuz Bhf' until 'Berlin-Neukölln' → switch to U7, direction 'S+U Rathaus Spandau' until 'U Möckernbrücke' → switch to U1, direction 'U Uhlandstr.' until 'U Kurfürstenstr.' then walk 300 meters.
- Tram S45, direction 'S Südkreuz Bhf' until 'Berlin Tempelhof' → switch to U6, direction 'U Alt-Tegel' until 'Bahnhof Hallesches Tor.' → switch to U1, direction 'U Uhlandstr.' until 'U Kurfürstenstr.' then walk 300 meters.

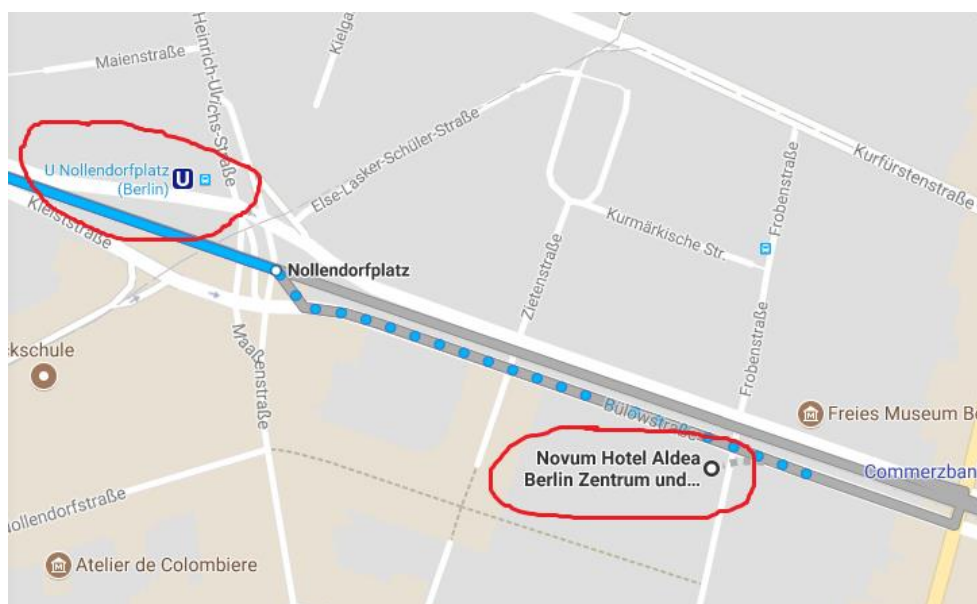
Below is a map showing the Hotel and the three possible destination stops.



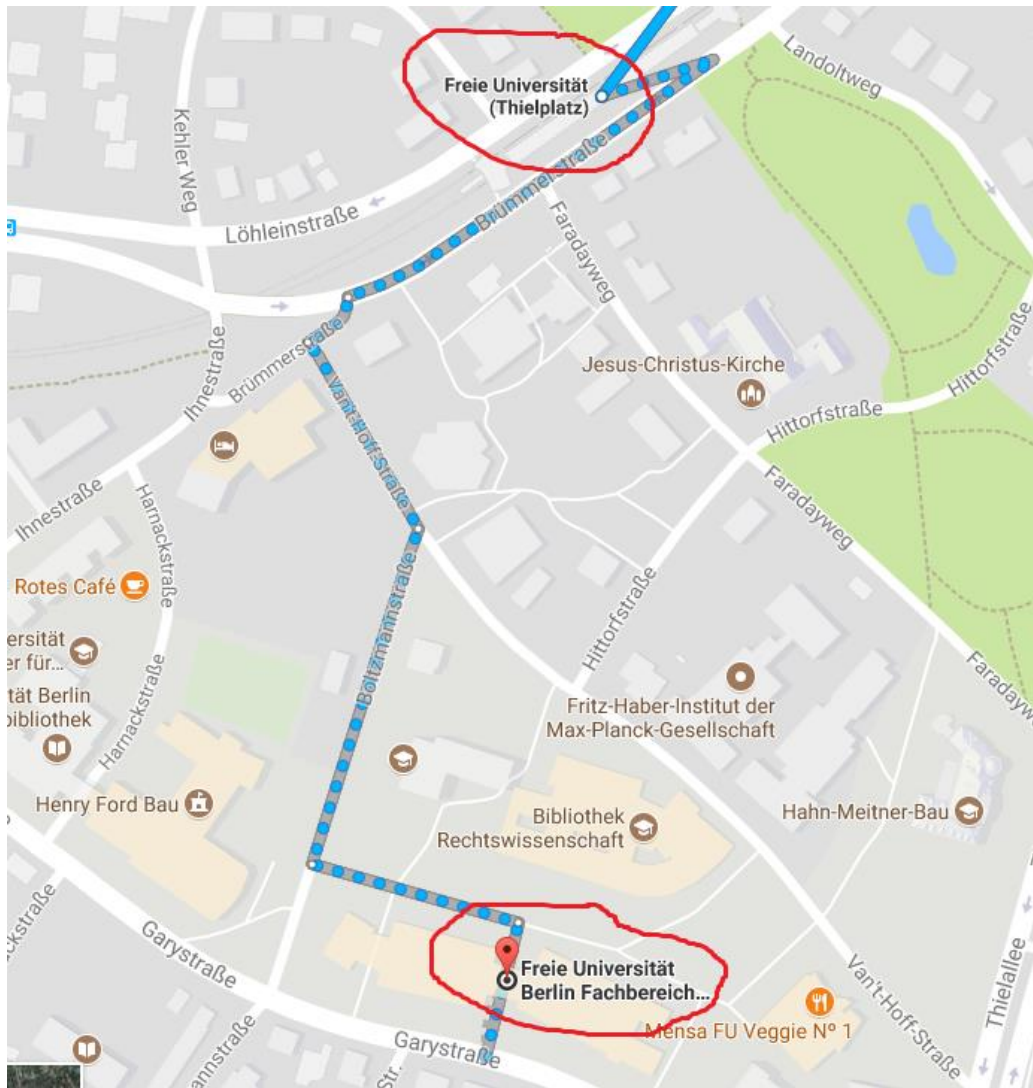
Transport from the Hotel to the Freie Universität Berlin:

To arrive at the Freie Universität Berlin, take the subway U3 from ‘Nollendorfplatz’, direction ‘U Krumme Lanke’ until ‘Freie Universität (Thielplatz)’. The subway leaves ca. every 5-7 minutes.

The map below shows the way from the Hotel to the subway station ‘Nollendorfplatz’.



The map below shows the way from the subway station to the School of Business and Economics.



Transport from the Novum Hotel Aldea to the Hotel Berlin:

The workshop venue can be reached by foot from the hotel (ca. 10 min walk), as shown on the map below.

