** INVITATION**

**IEA-EBC Annex 73:** **Towards Net Zero Energy Resilient Public Communities**

**First preparation phase experts meeting and a Workshop**

**April 24-26, 2017**

**Copenhagen, Denmark**

To: Annex 73 experts

Dear Colleagues,

The first preparation phase Annex 73 experts meeting and a workshop will take place in Copenhagen, Denmark on April 24-26, 2017 hosted by the Ramboll Company.



**Meeting place:** The meeting will take place at Ramboll Company, Ramboll, Hannemanns Alle 53, 2300 Copenhagen S, Denmark, located next to Ørestad reginal train station, 2 stops from the airport and has a metro line connection to the city centre.

**Hotel:** We recommend to stay at the Crowne Plaza hotel located next to the Ramboll office building. Please book your hotel on-line at: [https://www.ihg.com/crowneplaza/hotels/us/en/ copenhagen/rkecp/hoteldetail](https://www.ihg.com/crowneplaza/hotels/us/en/%20copenhagen/rkecp/hoteldetail)

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**Transport from CPH airport to the Crowne Plaza and Ramboll:** Take the regional train towards Copenhagen Central from the underground station in arrival terminal 3 and get off at Ørestad station (2 stops from the airport).

Take the metro line from the airport station 1st floor in terminal 3, in case you want a hotel in the city center near Kgs Nytorv.

**By taxi:** There is a taxi stand in front of the airport exit.

The experts meeting and the Workshop will take place at the **Ramboll Company**. Courtesy of Danish industry partners, participation in the experts’ meeting and the workshop will be free of charge.

**Registration:** To register for the meeting please fill-in attached form and send it not later than 8 April to the address given on the next page.

If you have any questions about the logistics, please don’t hesitate to contact Anders Dyrelund, email: **AD@Ramboll.com**

Looking forward to seeing you all in Copenhagen.

With kind regards,

IEA EBC Program Annex 61 co-operating agents:

Alexander Zhivov and Rüdiger Lohse

**IEA-EBC Annex 73:** **Towards Net Zero Energy Resilient Public Communities**

**First Preparation Phase Experts Meeting and Workshop**

**April 24-26, 2017**

**Copenhagen, Denmark**

**Location: Ramboll Company, Copenhagen**

**Preliminary program**

|  |  |  |
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| **April 24, 2017. Annex 73 working meeting** | | |
|  | | |
| 8:30 | Introductions |  |
| 8:45 | Alexander Zhivov/Rüdiger Lohse | Opening remarks and objectives for the meeting |
| 9:15 – 10:45 | Task A | Energy Targets (except for Resilience) |
| Resilience |
| Scope of modeling subtask and methodology to be used |
| 10: 45 | Coffee break |  |
| 11:00-13:00 | Task B | Case studies: methodologies and potential candidates |
|  |
| **13:00** | **Lunch at the Ramboll canteen** |  |
| **14:00 -**  **16:00** | Tasks D and E | Guidance for Net Zero Energy Master Planning |
| Develop a functional description of the role of modeling tools in the Net Zero Energy Master Planning Process. |
| **16:00-17:00** | List of things to do A-F (w/o Tasks C and E) |  |
| Evening on your own | | |
|  | | |
| **April 25, 2017 Workshop** | | |
| **Time** | **Speaker** | **Topic** |
| 08.15–09.00 | Registration |  |
| 09.00 | Opening remarks | Anders Dyrelund, Ramboll |
| 9:15 | Welcome address | TBD (Energy Agency, local energy authority, MOD, etc)?? |
| 09.30 | Overview of the IEA EBC Annex 73 | Alexander Zhivov, ERDC (USA)/Ruediger Lohse (KEA, Germany) |
| 10.00 | Heat Road Map Europe | Brian Vad Mathiesen, AAU, to be confirmed |
| 10.30 | Coffee Break |  |
| 11.00 | Energy projects for DH&C in cities and campuses in DK and US | TBD, Ramboll |
| 11.30 | DH&C technologies | Sven Verner, Halmstad University, to be confirmed |
| **12.00** | **Lunch at the Ramboll canteen** |  |
| 13.00 | State of the art cases for DH&C production and storage for integration of wind | TBD, Ramboll |
| 13.30 | Conversion from steam to DH&C in the Copenhagen Municipality | TBD, HOFOR |
| 14:00 | District heating of the Høvelte and Nymindegab military camps | Jens Peter Sandemand, MOD DK and Jan Olsen, Norfors |
| 14.30 | **TBD** | IDEA (USA) |
| 15.00 | **Coffee Break** |  |
| 15:30 | **TBD** | AEE (Austria) |
| 16.00 | Exemplary future DH-concept and resulting input parameters for EMP-tools | Stephan Richter, GEF (Germany) |
| 16:30 | Community Resiliency Nodes – Analysis and results of integrated micro or district energy grid concept on community safety and resiliency**.** | Bobby Jeffers, Sandia National Laboratory (USA) |
| 17:00 | CITIES Strategic Research Centre for IT-intelligent Energy Systems in Cities” and “Energy Lab Nordhavn Full-Scale Smart Energy Lab | Carsten Rode (DTU) |
| 17.25 | Concluding remarks and summary | Alexander Zhivov, ERDC (USA) |
| 17:30-18:00 | Presentations by Industry sponsors |  |
| 18:00-19:00 | Reception in poster area, networking with sponsors | |
| 19.00-22.00 | Dinner and networking | |
|  | | |
| **April 26, 2017. Annex 73 working meeting** | | |
| 8:30 | Alexander Zhivov, ERDC (USA)/Ruediger Lohse (KEA, Germany) | Opening remarks |
| 08:45 | **Task C** | Scenarios |
| Modeling tools for district systems |
| 10:45 | **Coffee Break** |  |
| 11:00 | **Task F** | Business, legal and financial aspects of Net Zero Energy Master Planning. |
| 11:45-12:15 | Finalizing the proposal |  |
| 12:15-12:30 | The status of the Annex 73 participation | Registrations  Letters of participation  Potential funding |
| 12:30-12:45 | Website |  |
| 12:45-13:00 | Alexander Zhivov/Rüdiger Lohse | Assignments and timeline  Closing remarks |
| 13:00-14:00 | **Lunch in the Ramboll canteen** |  |
| 14:00-14:30 | **Bus transfer to DTU** |  |
| 14:30-16:00 | **Presentation of the District Energy Systems at the campus in Lyngby and a technical tour** | Anders B. Møller, Operation Manager of the Campuses of The Technical University of Denmark, Lyngby Denmark  <http://www.dtu.dk/english/about/campuses/dtu-lyngby-campus> |
| 16:30 | **Return to Hotel Crowne Plaza** | |

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**Registration form**

**IEA-EBC Annex 73: Towards Net Zero Energy Resilient Public Communities**

**Experts Meeting- Preparation Phase April 24 & 26, 2017**

**Workshop: April 25, 2017**

**Copenhagen, Denmark**

**Please send to:** [**AD@Ramboll.com**](mailto:AD@Ramboll.com)**,** [**Alexander.M.Zhivo@usace.army.mil**](mailto:Alexander.M.Zhivo@usace.army.mil) **and** [**Ruediger.Lohse@kea-bw.de**](mailto:Ruediger.Lohse@kea-bw.de)

1. **Participant Full Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
2. **Affiliation (organization name in English)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
3. **Position in the Company\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
4. **Country\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
5. **Your contact information:**
   1. **Address:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
   2. **Phone:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
   3. **Cell:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
   4. **Email: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
6. **I will participate in the Annex 61 meeting in Copenhagen**

**April 24\_\_\_\_\_\_YES\_\_\_\_\_\_\_\_\_\_NO**

**April 25\_\_\_\_\_\_YES\_\_\_\_\_\_\_\_\_\_NO**

**April 26 \_\_\_\_\_\_YES\_\_\_\_\_\_\_\_\_\_NO**

1. **I will be staying at**
   1. **Crown Plaza Hotel**  **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
   2. **Other hotel (please identify)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Signature and date**