

Road to Decarbonisation: Clean, Smart and Secure Solutions

International Conference

6 December 2022

Arnhem

The Netherlands

Towards local energy communities, affordable electricity grids and resilient organisations – the CleanMobilEnergy project final conference

Location: Industrial Park Kleefsewaard
(Westervoortsedijk 73, 6827 AV, Arnhem, NL)

Free registration at: <https://www.eventbrite.de/e/road-to-decarbonisation-clean-smart-and-secure-solutions-tickets-438636833577>

Conference Co-Organised by :

CONFERENCE PROGRAMME – 6th Dec 2022

9.00 – 10.00	Registration Open with Coffee & Tea	
10.00 – 10.10	Welcome	Welcome by Council Alderman, Municipality of Arnhem
10.10 – 11.50	Plenary sessions – Setting the scene: Towards local energy systems	
	Matching local e-mobility with renewables: Learnings from the CME project	<u>Peter Swart</u> , City of Arnhem and the CleanMobilEnergy consortium
	Roll-out of smart charging with solar energy in NL	<u>Marisca Zweistra</u> , ElaadNL knowledge and innovation centre
	Public-private partnerships to accelerate the transition	<u>Elsie Haertjens</u> , Veolia
11.50 – 13.00	Networking lunch with walking visit to nearby Arnhem pilot installations	
13.00 – 14.15	Parallel streams	
Stream A1	Technical approaches to local energy management	Luxembourg Institute of Science and Tech. & Open Remote (NL); Unicorn Engineering (DE); TNO (NL-tbc)
Stream B1	Social inclusion and engagement	TU Eindhoven (NL); COBEN project (BE); Nottingham City Council (UK)
14.15 – 14.35	Coffee & Tea break	
14.35 – 15.50	Parallel streams	
Stream A2	Governance & business models	Samen Om (NL-tbc); AMS Institute (NL); Spectral (NL)
Stream B2	Integrating local energy and e-mobility	eFlow Europe (DE); POLIS Network (BE); City of Utrecht (NL)
15.50 – 16.10	Coffee & Tea Break	
16.10 – 17.00	Plenary – Panel discussion by stream moderators – How will the future local energy system work, and what are the steps to realise this?	
17.00 – 17.10	Wrap-up by moderator	
17.10 – 18.30	End – Drinks & bites	

Parallel Streams Programme – 6th Dec

13.00-
14.15

Theme A1: Technical approaches to local energy management

In the past decade massive steps have been made in technological innovation to transition to a low carbon society, from hardware such as efficient solar panels, bi-directional EV chargers and energy storage to smart software such as data platforms and energy management systems.

In this session, the open source energy management system from the CleanMobilEnergy project will be presented, and the state of the art of small-scale hydrogen energy storage and Vehicle-to-X applications will be discussed.

Moderator: Ian Hill, European Development consultant

Key Presentations (15 minutes each)

ReMOVE, the open-source energy management system from the CleanMobilEnergy project

**Ulrich Leopold, Luxembourg Institute of Science and Technology, and
Pierre Kil, Open Remote**

Tackling the seasonal storage problem with local hydrogen

Felix Friedrich, Unicorn Engineering

Drive2X project – EVs as the great energy balancer

TNO, Drive2X project consortium

13.00-
14.15

Theme B1: Social inclusion and engagement

The transition to a sustainable local energy system has an impact on local communities in many ways. Informed engagement of local stakeholders from an early stage is crucial in the success of projects. Inclusion of communities in the decision making and ownership of local energy assets and infrastructure can significantly improve the buy-in, acceptance and ongoing engagement in transition activities.

In this session the experiences and learnings from 3 projects implemented in real communities will be discussed, from collective ownership of renewable energy, flexible sharing of energy and making the transition to an EV fleet.

Moderator: Avi Ganesan, Resourcefully

Key Presentations (15 minutes each)

From community smart grid experiments to the future system – experiences from the community Virtual Power Plant (cVPP) project

Luc van Summeren, Technical University Eindhoven

Delivering community benefits of civic energy – lessons from the COBEN project

Elsie Haertjens, Veolia

Staff engagement in the transition to an EV fleet at the Nottingham council depot

Matt Ralph, Nottingham City Council

Parallel Streams Programme – 6th Dec

14.35 –
15.50

Theme A2: Governance and business models

As the energy system moves away from a centralised supply model with large power plants and transmission networks to decentralised generation, storage and flexible consumption, new social, legal and financial arrangements need to be made to ensure fair decision making and sharing of benefits. For example, this can take the form of an energy cooperative, stakeholder-owned ESCo, government-owned company, etc.

In this session we will look at several new and existing examples of reaching the governance and business model which fits the local situation, from a community district heating network to a cooperative of local businesses avoiding grid-lock and an inclusive model in Amsterdam.

Moderator: Peter Swart, City of Arnhem

Key Presentations (15 minutes each)

Self-supply+ model for energy cooperatives to trade energy at real-time

Samen Om (tbc)

Developing the Local Inclusive Future Energy system in Amsterdam – the LIFE project

Hans Roeland Poolman, Amsterdam Institute for Advanced Metropolitan Solutions

A cooperative of local businesses to realise smart energy management at the Schipol Trade Park

Stefan Kop, Spectral

14.35 –
15.50

Theme B2: Integrating local energy with e-mobility

The rapid rise of electric vehicles in Europe is one of the most exciting and challenging aspects of the energy transition. It offers improved air quality and health, decoupling from oil price shocks, and a fleet of ‘batteries on wheels’ to balance the power grid on the one hand, and challenges regarding roll-out of charging infrastructure, developing new business models and policy frameworks, and the impact of charging on the grid infrastructure on the other.

In this session we dive into initiatives taking place across Europe to tackle these challenges while achieving the benefits promised by EVs, from large-scale light EV roll-out to replace cars and upscaling Vehicle-2-Grid and linking shared e-mobility with local renewable energy.

Moderator: TBC, ElaadNL

Key Presentations (15 minutes each)

Rolling out light-EVs as a car alternative at a large scale – experiences from Stuttgart CME project

Hannes Neupert, eFlow Europe

Upscaling V2G at a European level – the SCALE project

Juliette Thijs, POLIS Network

Creating shared mobility hubs with local renewables – experiences from the eHubs project

Matthijs Kok, City of Utrecht

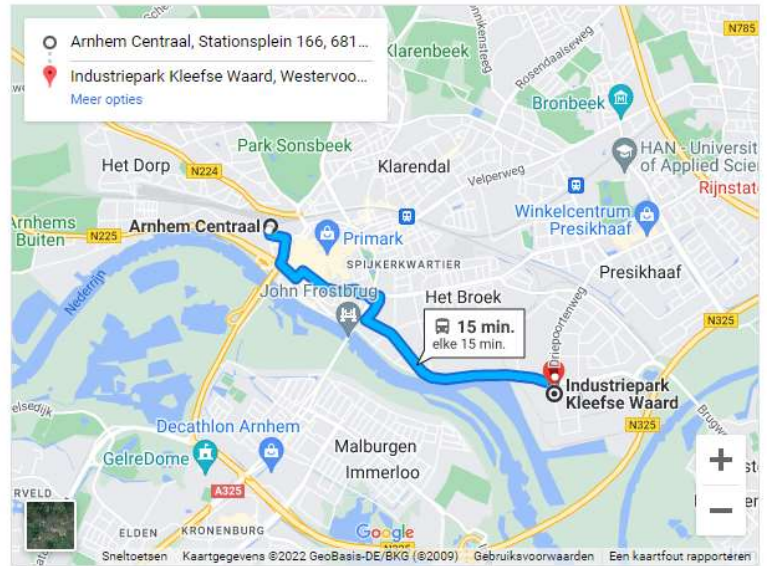
Travel and Accommodation options

The conference venue is at the
Industrial Park Kleefse Waard
(IPKW) terrein in Arnhem.

We recommend taking the bus **#12**
or **#43** from the station or your
hotel to the venue.

For the bus route, please see:

<https://goo.gl/maps/nNm6bpw29pEgSM9WA>

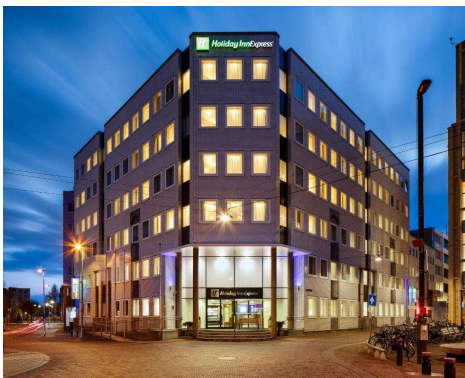


Recommended Hotels (along the bus route to IPKW venue)



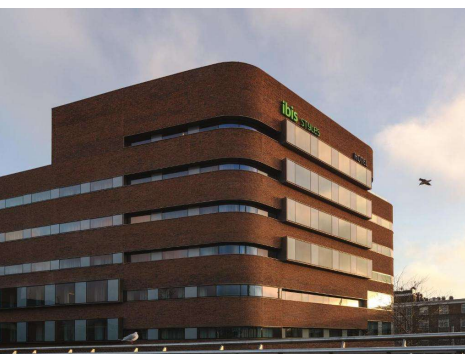
Bastion Hotel Arnhem (4 ☆)

<https://www.booking.com/Share-KW9Seg>



Holiday Inn Express (3 ☆)

<https://www.booking.com/Share-ntjilY>



Ibis Styles Arnhem (3 ☆)

<https://www.booking.com/Share-dTJVnL>