

IEA Experts Group on R&D Priority-setting and Evaluation (EGRD)

**Workshop: Technologies and innovations
for the climate-neutral city**



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12. - 13. May 2025
Vienna, Austria and Online

hosted by the Austrian Ministry for Innovation, Mobility and Infrastructure in cooperation
with the IEA Decarbonization of Cities and Communities TCP.

Day 1 – 12. May:

BMIMI, Radetzkystraße 2, 1030 Wien, Festsaal

Day 2 – 13. May:

die HausWirtschaft, Bruno-Marek-Allee 5/1, 1020 Wien, NordbahnSaal

Rationale

Cities as key players in the climate crisis

Cities play a central role in combating the climate crisis, accounting for approximately 75 % of global CO₂ emissions and 78 % of the world's energy consumption. As urban populations continue to grow, cities will increasingly face the impacts of climate change—such as heatwaves, air pollution, and extreme weather events. However, cities, as economic engines and hubs for research and innovation, possess significant potential to develop new strategies and lead efforts in climate protection, adaptation and mitigation.

Integrating Technologies for a Sustainable Urban Future

The development and demonstration of energy-efficient buildings and technologies are key to the transformation toward "climate-neutral cities." Research into the systemic interactions among buildings, building technologies, and energy infrastructure is crucial. This includes focusing on resource-efficient materials and incorporating components that enhance energy efficiency in both new constructions and renovations.

Achieving climate neutrality also requires the integration and interoperability of various technological subsystems. A diverse range of technologies and components must be integrated into cohesive, interoperable, and energy-efficient systems that work seamlessly together.

The Benefits of Climate-Neutral Cities for Society and Economy

Climate-neutral urban areas not only contribute to climate protection but also provide substantial benefits for their residents. These areas excel in ecological sustainability while delivering economic advantages. By utilizing renewable energy, energy-efficient buildings, and shared-use concepts, the cities enable residents and businesses to reduce costs. Furthermore, the adoption of sustainable practices fosters expertise in environmentally friendly technologies, potentially creating new job opportunities and driving innovation. These urban environments offer improved air quality, reduced noise pollution, abundant green and open spaces, robust infrastructure, and appealing mobility options, all of which enhance overall quality of life.

The city of the future will require integrated, digital, and circular solutions for buildings and transportation systems, and supply and disposal infrastructure. In fact, many cities are already leading the way in climate protection and resource conservation, with initiatives such as planning and development of positive energy districts, low-carbon transport systems, and integrated waste and recycling solutions.

Workshop Focus

This workshop will focus on technologies and system innovations that contribute to the progress of climate-neutral and resilient cities, neighbourhoods, and buildings. Experts will discuss research priorities, policy instruments, and best practices that facilitate the transformation toward sustainable urban environments.

Key questions to be addressed are:

How can cities achieve the goal of climate neutrality? What are the main challenges and risks involved?

What are the resilient transformation pathways for future system innovations?

New technologies and business models: Where do we currently stand, and what is still needed?

Which instruments and activities should be supported? What are the primary factors to consider when shaping R&D policies and decision making?

Target audience

In addition to EGRD members and national experts, we are seeking input from social scientists, behavioural economists, RD&D decision-makers, strategic planners, and programme managers across industry, academia, think tanks, national laboratories, Pioneer Cities, NGOs, and government. Participation onsite is by invitation only. Online participation is open to all.

Organizers

This workshop is organized by the IEA Experts Group on R&D Priority Setting and Evaluation (EGRD) in collaboration with the Decarbonization of Cities and Communities (Cities TCP), and hosted by the Austrian Ministry for Innovation, Mobility and Infrastructure.

Expected outcomes

The workshop will culminate in a summary report that identifies the key challenges and opportunities of research and innovations for climate-neutral cities. It will also present valuable perspectives and best practice for R&D planners and strategists.

IEA Experts Group on R&D Priority-setting and Evaluation

EGRD is an informal advisory group under the IEA Committee on Research and Technology (CERT). Its role is to support CERT delegates by providing advice on R&D priority-setting, aligning R&D activities to governmental policy objectives, offering methodologies for evaluating R&D efforts, and addressing emerging and systemic R&D topics. Recent subjects of focus include Recent topics include: Improving the Resilience of the Complete Clean Energy Supply Chain (2023), Social Impacts of Clean energy Policies (2023) and Climate Neutral Heating and Cooling: RD&D Needs and Perspectives for International Cooperation (2023). Workshop summaries are available here: <https://userstcp.org/iea-egrd>

AGENDA

Day 1 - 12. May 2025: Location: BMIMI, Radetzkystraße 2, 1030 Wien, Festsaal	
8.30	Registration and coffee/tee
9.00	Opening remarks Henriette Spyra, Directorate General "Innovation" (Federal Ministry for Innovation, Mobility and Infrastructure) (t.b.c)
9.10	About EGRD and the workshop Birte Holst Jørgensen, Chair EGRD
	Mission "Climate-neutral City" - Getting Austria's towns and cities fit for the future Anna Wang, Federal Ministry for Innovation, Mobility and Infrastructure Cities TCP – Decarbonising Cities & Communities Helmut Strasser, Salzburger Institute for Regional Planning and Housing, chair of the cities TCP IEA Cities
9.35	Session 1: Setting the scene: Vision - What should climate neutral cities look like in 2050? <i>Facilitator: Birte Holst Jørgensen</i> Smaller, lower, slower, simpler: low tech, low cost solutions for a sustainable future David Sim, Architect SAR/MSA, FRIAS Resilient Cities Nicola Tollin, University of Southern Denmark, Resilient cities Action planning for climate neutral cities in Europe: From the Covenant of Mayors to the Mission on 100 climate neutral and smart cities Paula Bezzera, Project Officer – Local Climate and Sustainable Energy Policy Analyst, European Commission <i>Discussion</i>
11.00	Coffee Break

11.25	Session 2 -What do we need to achieve the vision. <i>Facilitator: Johannes Tambornino</i> • Empowering Urban - Energy Transitions Smart cities and smart grids Vida Rozite, Energy Policy Analyst at International Energy Agency (IEA) • Global Covenant of Mayors for Climate and Energy (GCoM) Benjamin Jance, Co-Managing-Director, Global Covenant of Mayors for Climate and Energy (GCoM) • From Research to Resilience: Driving Urban Transitions through a Transnational R&I Partnership Orsolya Küttel, CEO Driving Urban Transitions Partnership • Key technologies for carbon neutrality in warm cities Yoshiyuki Shimoda, Professor at Osaka University and Director-general/RITE <i>Discussion</i>
12.50	Lunch Break
13.40	Session 3 – Showcase regions: Case studies from leading smart and sustainable cities <i>Facilitator: Atsushi Kurosawa</i> • Phasing Out Gas - Vienna Heating and Cooling 2040," initiative "100 projects out of gas", Project „Deutschordenstrasse" Waltraud Schmid, Urban Innovation Vienna • Driving Decarbonisation and SDG Localization: Insights from Leading Smart and Sustainable Cities in Asia Junichi Fujino, Principal Researcher at IGES - Institute for Global Environmental Strategies • "30 Years of integrated, ressource-efficient Urban Development in Graz – Status Quo and Outlook Christian Nussmüller, City of Graz, Executive Office for Urban Planning, Development and Construction • Klagenfurt on the way to climate neutrality by 2030 and beyond Stefan Guggenberger, Climate Neutral City Klagenfurt <i>Discussion</i>
15.25	Drinks & Snacks
15.30	Technical Tours • 100% renewable heating and cooling supply in social housing - the demonstration Project Käthe-Dorsch-Gasse 14, 1140 Vienna Simon Handler, ha.con • Demonstration Project "Exit from Gas: Deutschordenstrasse", 1140 Vienna (t.b.c.)
17:25	End of event

Day 2 – 13. May 2025

Location: Die HausWirtschaft, Nordbahnsaal, Bruno-Marek-Allee 5/1, 1020 Wien

08:30	Registration and coffee/tee
9.00	Session 4 - Research for Climate-Neutral Cities: Innovations for a Sustainable Future <i>Facilitator: Herbert Greisberger, eNu</i> • Urban transformation through research and development: How to recognise the key role of social innovation Christian Peer, Senior Scientist future.lab Research Center, Faculty of Architecture and Planning, Vienna University of Technology • Green, local, digital = quarter-concept of Bedburg Kaster: Proven as a Role-Model? Arndt Brauckmann, E.ON Energy Solutions GmbH • IEA EBC Annex 83 on Positive Energy Districts: research activities, outcomes and future research Francesco Guarino, University of Palermo, Department of Engineering, Assistant Professor Francesco Reda, Smart cities and intelligent buildings, VTT Technical Research Centre of Finland Ltd. • System demonstrators for Climate Neutral Cities - Vinnova's and Viable Cities' joint initiative Björn Svensby, Vinnova • Netherlands, locally-led governance of residential heat transitions and urban heat planning, lessons learned and recent updates in policy instruments Marion Bakker, Netherlands Enterprise agency (RVO), Policy advisor Energy-innovation Heating and Cooling, Vice chair IEA cities TCP, Delegate IEA Heat pumping technologies TCP <i>Discussion</i>
10.45	Coffee Break
11.15	Session 5 –Final discussion: Workshop summary and R&D recommendations <i>Facilitator: Herbert Greisberger, eNu</i> Which instruments and activities must be supported? Which are the main factors to be considered regarding R&D policies and decision making?
12.15	Guided Tour ‘Die HausWirtschaft’ as a driver of urban transformation Christian Peer, Head of Urban Transformation Center & Social Innovation Cluster, future.lab Research Center, Technische Universität Wien The tour provides insights into a cooperative and radically mixed-use co-housing model for socially inclusive, energy-efficient, consistent and sufficient urban living.
13:15	End of event

Practical information

Venue Day 1 – May 12th 2025

Federal Austrian Ministry for Innovation, Mobility and Infrastructure
Festsaal, Radetzkystraße 2, 1030 Wien

Important information: The Federal Ministry carries out an airport-style security check at the entrance. Please ensure you have a valid ID with you, as it will be checked against the registration list. We kindly request that you arrive at 8:30 AM to allow time for the security process.

Venue Day 2 – May 13th 2025

Die HausWirtschaft e.Gen., Nordbahnsaal
Bruno-Marek-Allee 5/1, 1020 Wien

diehauswirtschaft.at/nordbahnsaal/

Hotel recommendations

- Hotel Mercure Wien City (4 Stars):
all.accor.com/hotel/1568/index.de.shtml
- Hotel Stefanie - Schick Hotels (4 Sterne):
hotelstefanie.wien
- Mercure Grand Hotel Biedermeier Wien (4 Sterne):
all.accor.com/ssr/app/mercure/rates/5357/index.de.shtml?compositions=1&dateIn=2025-02-19&nights=1&hideHotelDetails=false&hideWDR=false&destination=vienna-austria
- Hotel Kärntnerhof (3 Sterne):
karntnerhof.com
- Magdas Hotel:
magdas-hotel.at

Registration & Information

nachhaltigwirtschaften.at/en/events/20250513-registration-egrd-workshop.php

Workshop on the IEA Website: iea.org/events/iea-egrd-workshop-technologies-and-innovations-for-the-climate-neutral-city

General Information

Vienna is a very welcoming city to spend time in. You should have no trouble getting around even if you do not speak German. There are no roaming charges if you use a SIM card from any of the EU countries. In case you want to buy a contract-free SIM card, they are available at practically every grocery shop.

The currency accepted is Euro, and many banks offer currency exchange. Cash is required in some places. While credit and debit cards are widely accepted in Vienna, especially at hotels, restaurants, and major tourist attractions, it is advisable to carry some cash for small purchases. Some businesses, particularly small shops, market vendors, and street food stalls, may only accept cash payments, so it is always a good idea to have some euros on hand.

Shops close early; please be mindful that Vienna has relatively conservative shopping hours compared to other major European cities, with many shops and businesses closing early, particularly on weekends and public holidays. Most shops operate from Monday to Saturday, with Sunday typically reserved for leisure and family time. It is important to plan your shopping and sightseeing activities accordingly, as some shops may close as early as 6:30 or 7:00 PM on weekdays and 6:00 PM on Saturdays.

How to Get to Vienna

- **Flight:** Vienna International Airport (VIE) serves as the primary air gateway to the city, with numerous airlines offering direct flights from major cities worldwide. Upon arrival, travelers have the option of taking the [City Airport Train \(CAT\)](#) (one-way ticket: € 14.90) or the [S-Bahn](#) (one-way ticket: € 4.50) to reach the city centre. The CAT provides a non-stop service that takes approximately 16 minutes to reach Wien Mitte station, while the S-Bahn makes multiple stops along the way, taking about 25 minutes to reach the same destination. CAT and ÖBB (Austrian Federal Railways) tickets can be purchased both on-site and online.
- **Train:** Vienna's strategic location in the heart of Europe makes it easily accessible by train from neighboring countries. The city is well-connected to major European cities such as Budapest, Prague, Munich, and Zurich, with frequent rail services operated by [ÖBB \(Austrian Federal Railways\)](#) and international rail companies. Travelers arriving at Vienna Central Station (Wien Hauptbahnhof) or Vienna West Station (Vienna Westbahnhof) can easily transfer to their accommodations via the subway (U-Bahn) or other public transport options.
- **Bus:** Several bus companies offer direct services to Vienna from various European cities, providing an affordable and convenient travel option for budget-conscious travelers. The Vienna International Bus terminal (VIB) serves as the main bus station in the city, located near Erdberg station on the U3 subway line. Südtiroler Platz, at the Vienna Central Station, is also an option for international buses. You could check out [Flixbus](#), [Regiojet](#), or platforms such as [Omio](#), [Trainline](#), and [Busbud](#) for more information.
- **Taxis** are readily available at Vienna International Airport, offering a convenient door-to-door transport option for travelers with heavy luggage or those seeking a more private mode of transportation. Alternatively, ride-hailing services like [Uber](#) and [Bolt](#) also operate in Vienna, providing an additional option for travelers looking for on-demand transportation.

How to Move Around

- **Public Transport:** Vienna boasts an extensive and efficient public transport network, including trams, buses, the U-Bahn (subway), and S-Bahn (commuter train). The Wiener Linien (Vienna Lines) network covers the entire city and surrounding areas, making it easy for travelers to navigate Vienna's attractions and neighborhoods. Travelers can purchase single tickets (€ 2.40), 24 hours passes (€ 8), 48 hours passes (€ 14.10), 72 hours passes (€ 17.10) or 7 days passes (€ 22.6) from ticket machines located at U-Bahn stations, online, and via the Wiener Linien App (WienMobil for iOS and Android). If you buy the ticket in the U-Bahn station, it is important to remember to validate your ticket before boarding trams, buses, or trains, as ticket inspections are regularly conducted by uniformed inspectors.
- **Bikes and Scooters:** Vienna is a bike-friendly city, with dedicated bike lanes and rental stations available throughout the city. Travelers can rent bicycles from various providers, including WienMobil, which offers a network of self-service bike stations located at key locations across Vienna. Electric scooters are also available for rent from companies like Lime, Bird, and Tier, providing a convenient and eco-friendly mode of transportation for short-distance travel.
- **Taxis** are readily available throughout Vienna and can be hailed on the street or booked in advance via phone or mobile apps. Licensed taxi stands are located at major transportation hubs, tourist attractions, and hotels, making it easy for travellers to find a taxi when needed. It is important to note that taxis in Vienna are metered, with fares calculated based on distance travelled and time spent in traffic. Additionally, ride-hailing services like Uber and Bolt also operate in Vienna.