

# Knowledge Exchange Forum

## Livable and Energy Efficient Cities

HOFBURG PALACE | VIENNA, AUSTRIA | JUNE 16-17, 2015



HOSTED BY THE FEDERAL MINISTRY OF FINANCE AND  
THE AUSTRIAN DEVELOPMENT AGENCY





Image: Courtesy of Joel Rocha

## ESMAP MISSION

The Energy Sector Management Assistance Program (ESMAP) is a global knowledge and technical assistance program administered by the World Bank. It provides analytical and advisory services to low- and middle-income countries to increase their know-how and institutional capacity to achieve environmentally sustainable energy solutions for poverty reduction and economic growth. ESMAP is funded by Australia, Austria, Denmark, Finland, France, Germany, Iceland, Lithuania, the Netherlands, Norway, Sweden, and the United Kingdom, as well as the World Bank.

# ESMAP Knowledge Exchange Forum:

## Livable and Energy Efficient Cities

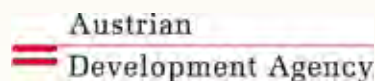
JUNE 16-17, 2015 | HOFBURG PALACE | MICHAELERKUPPEL, 1010 | VIENNA, AUSTRIA

We would like to welcome you to Vienna and to the **ESMAP Knowledge Exchange Forum on Livable and Energy Efficient Cities**.

This event brings together stakeholders from around the world to exchange experiences and lessons learned on the development of livable and energy efficient cities.

Topics of discussion will include: creating a vision for a livable, energy efficient city; institutional, financial and regulatory barriers to development of urban energy efficiency; successful delivery models; aligning national and local priorities; and the roles of civil society and the private sector. Through moderated discussions, this event is designed to encourage active participation throughout the day and enable learning from peers.

This event is organized by the World Bank Energy Sector Management Assistance Program (ESMAP) and hosted by the Government of Austria, Federal Ministry of Finance with support from the Austrian Development Agency and UNIDO.





## ESMAP Knowledge Exchange Forum: **Livable and Energy Efficient Cities**

HOFBURG PALACE | DACHFOYER CONFERENCE ROOM | VIENNA, AUSTRIA

### JUNE 16, 2015 | OPENING AND INTRODUCTION

**9:00** Light breakfast and registration

**10:00** Welcome: **Mr. Peter Launsky, Director General of Austrian Development Cooperation at the Ministry for Foreign Affairs**

**Opening remarks:**

- **Ms. Anita Marangoly George**, Sr. Director, Energy & Extractives Global Practice, The World Bank Group
- **Dr. Pradeep Monga**, Director and Special Representative of the Director General on Energy, UNIDO
- **Mr. Thomas Irschik**, Chief Executive Officer, Wien Energie

**Introductions:** Tour de Table

### SESSION 1 | Livable and Energy Efficient Cities: Creating a Vision

**11:00** Facilitator: **Mr. Rohit Khanna, Program Manager, ESMAP, The World Bank Group**

**Kick-off presentations:**

- **Mr. Peter Calthorpe**, Principal, Calthorpe Associates
- **Mr. Fernando Paez**, Director of Transport Systems, EMBARQ-Mexico (and former General Manager, Transmilenio, Bogota)

Suggested topics for moderated discussion:

- What constitutes a livable and energy efficient city?
- How does a city develop its vision and set targets/roadmap to become more livable and energy efficient?
- What are the key ingredients for such vision/target-setting/roadmap? What are the key drivers? What are the key challenges and how have cities overcome them?
- What role(s) can citizens/civil society play?

*Insights from activities and projects supported by ESMAP's City Energy Efficiency Transformation Initiative (CEETI), ESMAP's transport grants, and city energy diagnostics with the Tool for Rapid Assessment of City Energy (TRACE), including: Rio de Janeiro (Brazil), Leon (Mexico), Wuhan (China), Bangkok (Thailand), Kamianets-Podilskyi (Ukraine), Ternopil (Ukraine), Minsk (Belarus), and Addis Ababa (Ethiopia).*

**13:00** Lunch



## SESSION 2 | Integration of Energy Considerations Between National and Local Governments and Across Agencies/Institutions

14:30 **Facilitator: Ms. Shannon Lawrence, Director of Global Initiatives, C40 Cities**

### **Kick-off presentations:**

- **Mr. Benoit Lebot**, Executive Director, International Partnership for Energy Efficiency Collaboration
- **Mr. Fidel García**, Director General of Environmental Management, Leon, Mexico

Suggested topics for moderated discussion:

- How to engage with different levels of government? How to align local and national policies affecting urban energy?
- How to integrate energy considerations across sectors? Who takes the lead? How to coordinate? What are the key factors that explain successful implementation and delivery models? What adjustments and considerations are needed to adapt successful models from other cities and countries?
- What are the gaps and needs? How to overcome/address them?

*Insights from activities and projects supported by ESMAP's City Energy Efficiency Transformation Initiative (CEETI) and city energy diagnostics with the Tool for Rapid Assessment of City Energy (TRACE), including: Mexico, Macedonia, Egypt, Kosovo, and Kiev (Ukraine)*

16:00 **Break: coffee and networking**

## SESSION 3 | Mobilizing Resources and Engaging with the Private Sector

16:30 **Facilitator: Ms. Jennifer Layke, Director, Building Efficiency Initiative, WRI Ross Center for Sustainable Cities**

### **Kick-off presentations:**

- **Mr. Simão Pedro Chiovetti**, Secretary for Services, São Paulo Municipality, Brazil
- **Dr. -Ing. Rolf Hennes**, Principal Technical Expert Energy Efficiency, KfW Development Bank
- **Mr. Cathal Conaty**, Managing Director, International Housing Solutions

Suggested topics for moderated discussion:

- What are the costs and benefits associated with more livable and energy efficient cities? Are they sufficiently visible to inform policy and investment decisions?
- What are the resources available? How to access them?
- What role(s) can the private sector play? How to engage and develop partnerships with the private sector?

*Insights from activities and projects supported by ESMAP's City Energy Efficiency Transformation Initiative (CEETI), ESMAP's transport grants, and city energy diagnostics with the Tool for Rapid Assessment of City Energy (TRACE), including: Puebla (Mexico), Rio de Janeiro (Brazil), São Paulo (Brazil), Belo Horizonte (Brazil), Uruguay, India, and Wuhan (China)*

18:00 **Closing Remarks by Mr. Rohit Khanna, Program Manager, ESMAP, The World Bank Group**

19:00 **Reception hosted by the Government of Austria**

JUNE 17, 2015

## Field Visit ESMAP Knowledge Exchange Forum and Vienna Energy Forum 2015



**Date** 17<sup>th</sup> of June 2015  
**Time** 8:30 am – 5 pm  
**Meeting Point** Hofburg/Ballhausplatz

### Program

8:30 am	Pick up at Ballhausplatz/Hofburg
9:00 am- 11:30 am	Generation Site Simmering Field Visit of the Forest Biomass CHP and Gas CHP Plant and the World first High-Pressure Heat Storage Facility
12:00 am- 01:00 pm	Lunch at Spittelau
01:00 pm- 03:00 pm	Spittelau - Wien Energie World Field Visit of the Spittelau waste incineration plant including the district cooling centre
03:30 pm- 05:00 pm	Vienna University of Technology – Plus-Energy-Office-Building Austria's first office building which produces more energy as it requires. Presentation of the biggest facade-integrated photovoltaic system.

# SPEAKERS AND MODERATORS' BIOS

## OPENING REMARKS



**Peter Launsky,**  
**Director General of Austrian Development Cooperation**

Ambassador Peter Launsky has been the Director General of Austrian Development Cooperation at the Ministry for Foreign Affairs since 2014. From 2012 to 2014 he was acting as Under-Secretary-General for Communications and Public Information at the United Nations in New York, USA. Before joining the UN Mr. Launsky filled several posts for the Austrian Foreign Ministry, above all he was Head of Department for Press and Information and Spokesman.



**Ms. Anita Marangoly George,**  
**Senior Director, Energy and Extractives Global Practice, The World Bank Group**

Ms. Anita Marangoly George is the Senior Director of the World Bank Group's Energy and Extractive Industries Global Practice. In this position, she provides leadership and strategic direction to the Global Practice that fosters partnerships with key clients through lending, advisory and knowledge services. The sustainable development of energy and extractive industries is key to delivering on the World Bank's twin goals of reducing extreme poverty and improving shared prosperity. Before assuming this position on July 1, 2014, Ms. George was the Asia Pacific Regional Director for Infrastructure and Natural Resources at the International Finance Corporation (IFC), the private sector arm of the World Bank Group. She has played several roles in the World Bank Group, working in Asia, Africa, Middle East and Latin America. Besides her work with the Bank Group, she has headed Siemens Financial Services in India covering the telecommunications, power and transportation sectors, and has also served in management positions with the Steel Authority of India.

Ms. George holds a dual Masters' degree in Business Administration and Economic Policy from Boston University. She is married and the mother of two children.



**Dr. Pradeep Monga,**  
**Director and Special Representative of the Director General on Energy, UNIDO**

Dr. Pradeep Monga is Director, Energy Branch, United Nations Industrial Development Organization (UNIDO), Vienna. He is an energy expert with over 30 years of working experience in the field of energy policy, strategic planning and clean energy technologies.

Prior to joining UNIDO in 2001, Dr. Monga worked with UNDP for over five years overseeing their energy and environment portfolio in India. Before starting his UN career, Pradeep has held senior positions in the Government of India, and undertook several international assignments with the World Bank, FAO and other multi/bi-lateral organizations. A Fulbright Scholar, he has been a visiting Fellow at TERI, New Delhi, and World Resources Institute, Washington DC, and completed leadership and change management programme at the Harvard Business School. He is closely involved in strengthening of global partnerships and networks on energy such as UN Energy, Global Bioenergy Partnership, REEEP, REN 21, and has been closely associated with the global initiative on Sustainable Energy for All (SE4ALL) launched by UN Secretary General at Rio + 20 in June 2012.

Dr. Monga has presented technical papers in over 45 international seminars and workshops in the field of energy, environment and sustainable development focusing on energy policies, technology transfer and capacity building issues in developing countries and economies in transition. He has several technical papers to his credit, and has organized several global forum activities. He has co-authored three books and is working on his fourth on Renewable Energy for Industrial Applications: A Case Study of India.



**Mr. Thomas Irschik,**  
**Chief Executive Officer, Wien Energie**

Mr. Thomas Irschik was appointed CEO of Wien Energie with effect from 1 February 2015. Since the merger of Wien Energie GmbH and the former subsidiary Fernwärme Wien Ges.m.b.H. on 1 August 2013, Mr Irschik has been General Manager of Wien Energie GmbH.

At Wien Energie GmbH, Thomas Irschik is responsible for the following areas: Communication and marketing; Sales; Public Affairs; and Telecommunications. Thomas graduated in Business Administration, majoring in Corporate Management and Business Data Processing.

## SPEAKERS AND FACILITATORS

### SESSION 1 | Livable and Energy Efficient Cities: Creating a Vision



**Facilitator: Mr. Rohit Khanna,**  
**ESMAP Program Manager, Energy and Extractives Global Practice, The World Bank Group**

Rohit is Program Manager of the Energy Sector Management Assistance Program (ESMAP) at the World Bank. In this role, he oversees a portfolio of analytical and advisory activities in the energy sector. Rohit, an Indian national, joined the World Bank in 2000.

Prior to assuming his current position, he worked in the Global Environment Facility and Clean Technology Facility at the World Bank. He has country experience with the Bank in Cambodia, Ghana, Uganda, Mozambique, Thailand, and South Africa, and was part of the team that developed the CTF investment program for concentrating solar power in the Middle East & North Africa. Before joining the Bank, Rohit was a Programme Officer in the UN Environment Program and worked for Save the Children Federation in Bhutan. He graduated from the University of Delhi and has a Master's in Public Administration from American University.



**Speaker: Mr. Peter Calthorpe,**  
**Principal, Calthorpe Associates**

Metropolis Magazine claims: "The titles of Peter Calthorpe's books trace the recent history of urban design in its most vital and prescient manifestations, starting in 1986 with Sustainable Communities followed by The Regional City: Planning for the End of Sprawl, and most recently Urbanism in the Age of Climate Change."

In the early 90's Peter Calthorpe developed the concept of Transit Oriented Development described in The Next American Metropolis: Ecology, Community and the American Dream—an idea that is now the foundation of many regional policies and city plans around the world. In 1983, he founded the award-winning firm of Calthorpe Associates devoted to sustainable urban design and planning globally. For his contribution in redefining the models of urban and suburban growth, Calthorpe was named one of 25 "innovators on the cutting edge" by Newsweek Magazine and was awarded ULI's prestigious "J.C. Nichols Prize for Visionaries in Urban Development" in 2006.

Peter Calthorpe is one of the founders and the first board president of Congress of New Urbanism.



**Speaker: Mr. Fernando Paez,**  
**Director of Transport Systems, EMBARQ-Mexico (and former General Manager, Transmilenio, Bogota, Colombia)**

Fernando is the Director of Integrated Transport Systems at CTSEMBARQ Mexico. He is a Public Administrator from the Escuela Superior de Administración Pública of Bogota, Colombia. He specialized in Quality and Productivity Administration at the Universidad de Cali, Colombia with a minor in Administration and Management of Local Governments.

Prior to CTSEMBARQ, since 1993, Fernando held different positions in local and national public administration. In the period of 2006–2012, he was the Deputy Manager and later the General Manager of TRANSMILENIO, the managing entity of the Public Transport System of the City of Bogota. During his tenure, he coordinated and managed the structuring and implementation of the Integrated Public Transport System Project: SITP (acronym in Spanish) of Bogota.

### SESSION 2 | Integration of Energy Considerations between National and Local Governments and across Agencies/Institutions



**Facilitator: Ms. Shannon Lawrence**  
**Director of Global Initiatives, C40 Cities**

Shannon serves as the Director of Global Initiatives for C40, and is responsible for the development and delivery of C40's initiatives and networks. Previously, Shannon was the Head of the Energy Initiative at C40, where she supported city efforts in areas such as energy efficiency and district energy. Before joining C40, Shannon was the Vibrant Cities Project Director for the Sustainable Urban Forests Coalition. She also worked as an independent sustainability and energy consultant for clients such as the USGBC, Virginia Tech's Metropolitan Institute, Enterprise Community Partners and the World Resources Institute. Shannon spent ten years working for International Rivers and the Environmental Defense Fund promoting environmentally responsible and transparent energy and water planning in Africa and Asia. Shannon holds a Master of Arts in Law and Diplomacy from the Fletcher School of Law and Diplomacy at Tufts University, with concentrations in international environmental and resource policy and development economics. She has a BA in Economics and English from Georgetown University.





**Speaker: Mr. Benoit Lebot,  
Executive Director, International Partnership for Energy Efficiency Collaboration (IPEEC)**

Benoit is a Civil Engineer from France's National School of Public Works (1986). He also holds a Master of Science in Mechanical Engineering from the University of California in Berkeley (1987).

Prior to his appointment as Executive Director of IPEEC, Mr. Lebot has had an extensive history working in the fields of Energy Efficiency, Climate Change mitigation, and Clean Energy policies. In his previous position, since 2004, as a Climate Change & Sustainable Energy Policy Advisor for the United Nations Development Programme (UNDP), he provided technical leadership on UNDP activities to address Climate Change & sustainable energy policies in developing countries and emerging economies. He developed and managed UNDP portfolio of Climate Change mitigation projects in sub-Sahara Africa with a specific focus on energy efficiency public policies including legal, fiscal and technical measures.

From 1997 to 2003, Mr. Lebot worked at the International Energy Agency as an advisor within the Energy Efficiency Policy Analysis Division. Between 1990 and 1997, he was part of the French National Energy and Environmental Agency (ADEME) where he led numerous background technical studies for the first directives related to the promotion of energy efficiency in the European Union. He started his international career on energy efficiency from 1987 to 1990 as a Research Engineer at Energy Efficiency Division of the Lawrence Berkeley National Laboratory, in California.



**Speaker: Mr. Fidel García,  
Director General of Environmental Management, Leon, Mexico**

Fidel is currently Director General of Environmental Management in the Municipal Government of the City of León, in the Mexican state of Guanajuato. Fidel is also a professor at the Universidad La Salle and the Universidad Iberoamericana, both with campuses in León.

He is consulting adviser to the State of Guanajuato's Housing Cluster. This civil association is geared toward the promotion of better housing for the poor. Prior to his current position, he was an Environmental and Urban legal advisor for various organizations, government agencies and industry associations. He was the designated representative, by the State of Guanajuato, for the National Council for Sustainable Development of the Mexican federal government.

Fidel also spent six years at the Federal Attorney's Office for Environmental Protection, supervised compliance of environmental regulations of the State of Guanajuato. He has a Law degree and a Masters degree in Constitutional Law from the Universidad Iberoamericana in León, as well as having completed studies for a Masters in Public Policy at the Instituto Tecnológico.

## **SESSION 3 | Mobilizing Resources and Engaging with the Private Sector**



**Facilitator: Ms. Jennifer Layke,  
Director Building Efficiency Initiative, WRI Ross Center for Sustainable Cities**

Jennifer is the Director of the Building Efficiency Initiative of the WRI Ross Center for Sustainable Cities. She leads the Building Efficiency Initiative's research and collaboration with WRI cities teams and global buildings experts. From 2010–2014 Jennifer ran Johnson Controls' Institute for Building Efficiency, a global initiative to provide information and analyses on the technologies, policies, and practices to deliver high performance buildings. In addition, she supported strategic planning on corporate energy, sustainability and policy goals.

Jennifer's prior experience includes 12 years at the World Resources Institute where she was Deputy Director, Climate and Energy Program. She founded The Green Power Market Development Group which developed innovative energy procurement paths for corporate use of clean energy in the U.S. and Europe. Jennifer also managed corporate partnerships focused on strategies to reduce GHG emissions and was the lead for WRI's participation in USCAP, a partnership between environmentalists and business providing consensus recommendations on carbon cap-and-trade policy approaches.

Jennifer's international experience includes consulting for the World Bank and the U.S. EPA on Montreal Protocol technology transfer. She has an A.B. in Asian Studies/Political Studies from Pitzer College in Claremont, CA, and a M.S. and MBA from the University of Michigan. In 1990, she was awarded a Thomas J. Watson Foundation fellowship for a year of sociology research in Singapore, Malaysia and Taiwan.



**Speaker: Mr. Cathal Conaty, Managing Director,  
International Housing Solutions**

Cathal is a founder of International Housing Solutions, and serves as Managing Director with responsibility for portfolio management and fund administration. He is Chairman of the Investment Committee for the three funds managed by IHS. Cathal plays a key role in the development of new products, including most recently the design of an energy-efficient housing program integrated into IHS Fund II, a large multi-investor affordable housing fund investing in South Africa. Prior to founding IHS he served in a variety of roles in the U.S. with Lend Lease Real Estate Investments and its predecessor company, the Boston Financial Group. These included portfolio management, with an emphasis on investments in urban regeneration and mixed-income housing communities; property management, with an emphasis on financial and physical turnarounds of large urban properties, and asset management, where he represented the interests of investors in tax credit properties. Mr. Conaty is also founder and president of the Mathari Children’s Fund, a street children program caring for and educating impoverished children in Mathari, Kenya. He obtained an MBA from IESE, Barcelona, in 1991.



**Dr. -Ing. Rolf Hennes,  
Principal Technical Expert Energy Efficiency, KfW Development Bank**

Rolf holds a Ph.D. in Civil Engineering and has been working for KfW Group since 1987. Rolf spent 15 years within the Development Department of KfW and later moved to the Central Sustainability Department where he was working as principal technical officer in charge of domestic promotion programs such as housing, energy efficiency, renewables, energy access and infrastructure. During the last 3 years, the focus of his work has been on transferring KfW’s experiences in domestic energy efficiency promotion by means of loans and grant schemes to other regions of the world. Since his retirement in 2015, Rolf has been working as an independent consultant.



**Mr. Simão Pedro Chiovetti,  
Secretary for Services, São Paulo Municipality, Brazil**

Simão Pedro, a Sociologist, was invited by Mayor Haddad to be the Secretary of Public Utilities in the City of São Paulo in January 2013. The Secretariat is responsible for Waste Management, Urban Cleaning, Public Lighting, Funeral Service and Public Internet. It also manages part of the largest contracts for Public Utilities between the private sector and the City Hall.

Among the main programs implemented under Mayor’s Haddad Government and managed by the Municipal Secretariat of Service we highlight: the universalization of the selective collection and the expansion of recycling to 10% of all waste collected; the coordination of the project for the modernization and humanization of the funeral service in the capital; the implementation of free Wi-Fi in 120 squares around the city; and the Public Private Partnership (PPP) project in Public Lighting — which plans to remodel the lamps to LED lamps around the largest Park Lighting in Latin America, with 580,000 points.

He was a member in the Legislative Parliament of the State of São Paulo for three consecutive terms. He also assisted Popular Movements for Housing, Land Reform and Rural Workers. He started his political career in the Basic Ecclesial Communities (BECs) on the periphery of the state. He also advocates for the use of free software in the Public Administration and the freedom of the Internet network.

**Closing Remarks | By Mr. Rohit Khanna, ESMAP Program Manager, The World Bank Group**

## LIST OF PARTICIPANTS

**The final list of participants will be made available after the event has concluded.**

**Please visit our webpage at:  
[http://www.esmap.org/Energy\\_Efficient\\_Cities\\_Events](http://www.esmap.org/Energy_Efficient_Cities_Events)**

## Energy Efficient Cities Program

Cities are the engines of economic growth. More than half of all people on the planet live in an urban area. The United Nations forecasts that the world's urban population will increase to 64 percent by 2050, with 94 percent of that increase occurring in developing countries.

Cities are the consumers of about two-thirds of the world's energy, and are responsible for about 70 percent of the world's greenhouse gas emissions. Increased and rapid urbanization, together with rising incomes mean massive requirements for energy to power economic activity and expand basic infrastructure. Energy efficiency can offer practical, cost-effective solutions to expand and improve urban services, while contributing to cities' efforts to be more competitive and address climate change. Much of the growing population of developing country cities is poor—nearly one-third of the urban population lived on less than US\$1.25 a day in 2008. Energy efficiency can also free up resources to improve services to the urban poor. For countries with insufficient power supply and high peak demand, enhancing urban energy efficiency can also help address those challenges.

Innovative features of the Energy Efficient Cities program:

- Clients are city mayors and municipal bodies
- Demand-driven, responsive to city needs
- Fully integrated, centrally managed, multi-sector program
- Promotes innovation while still focusing on results
- Fosters global partnerships

For more information about the ESMAP Energy Efficient Cities Program, visit us at:

[http://www.esmap.org/Energy\\_Efficient\\_Cities](http://www.esmap.org/Energy_Efficient_Cities)





## AGENDA AT A GLANCE JUNE 16, 2015 | DACHFOYER CONFERENCE ROOM

09:00 Registration | Light Breakfast

10:00 Welcome: Mr. Peter Launsky, Director General of Austrian Development Cooperation at the Ministry for Foreign Affairs  
Opening Remarks:

- Mrs. Anita Marangoly George, Sr. Director, Energy & Extractives Global Practice, The World Bank Group
- Dr. Pradeep Monga, Director and Special Representative of the Director General on Energy, UNIDO
- Mr. Thomas Irschik, Chief Executive Officer, Wien Energie

### SESSION 1 | Livable and Energy Efficient Cities: Creating a Vision

11:00 Facilitator: Mr. Rohit Khanna, Program Manager, ESMAP, The World Bank Group

- Mr. Peter Calthorpe, Principal, Calthorpe Associates
- Mr. Fernando Páez, Director of Transport Systems, EMBARQ-Mexico (and former General Manager, Transmilenio, Bogota)

13:00 Lunch

### SESSION 2 | Integration of Energy Considerations Between National and Local Governments and Across Agencies/Institutions

14:30 Facilitator: Ms. Shannon Lawrence, Director of Global Initiatives, C40 Cities

- Mr. Benoît Lebot, Executive Director, International Partnership for Energy Efficiency Collaboration
- Mr. Fidel García, Director General of Environmental Management, Leon, Mexico

16:00 Break: coffee and networking

### SESSION 3 | Mobilizing Resources and Engaging with the Private Sector

16:30 Facilitator: Ms. Jennifer Layke, Director, Building Efficiency Initiative, WRI Ross Center for Sustainable Cities

- Mr. Cathal Conaty, Managing Director, International Housing Solutions
- Dr. -Ing. Rolf Hennes, Principal Technical Expert Energy Efficiency, KfW Development Bank
- Mr. Simão Pedro Chiovetti, Secretary for Services, São Paulo Municipality, Brazil

18:00 Wrap-up | Mr. Rohit Khanna, Program Manager, ESMAP, The World Bank Group

19:00 Reception adjacent to Dachfoyer (hosted by Government of Austria)

### JUNE 17, 2015 | SITE VISIT ORGANIZED BY WIEN ENERGIE