



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION

Federal Ministry for  
European and International Affairs



International Institute for  
Applied Systems Analysis



# VIENNA ENERGY FORUM 2013

## One year after Rio + 20: the energy future we want



Vienna, Austria, 28-30 May 2013

# Agenda



Federal Ministry  
for Economic Cooperation  
and Development



ADVANTAGE  
AUSTRIA WKO



renewable  
energy  
& energy  
efficiency  
partnership





Access to energy is critical for achieving sustainable development and the eradication of poverty. Therefore Austria has decided to make energy for sustainable development a thematic priority for its development cooperation. It is thus with great pleasure that I welcome world leaders in the energy sector and development

partners to the third Vienna Energy Forum, co-hosted by UNIDO, IIASA and the Austrian government. It will constitute another milestone for moving the world closer towards a sustainable energy future.

*H.E. Mr. Michael Spindelegger*



Energy is at the forefront of the global agenda. It is central to the issues of development, global security, environmental protection and achieving the MDGs. Profound changes are beginning to transform the way we supply, transform, deliver and use energy services – a trend that a revitalized global energy dialogue can reinforce, leading to a sustainable future for

all with multiple co-benefits for development, human health, environment and climate change.

*Kandeh K. Yumkella*



The Vienna Energy Forum provides a chance for researchers and policymakers to come to real, practicable solutions for the world's energy challenges. IIASA research—including the 2012 Global Energy Assessment—shows that it is possible to address all these issues simultaneously, creating energy security while

reducing pollution and slowing climate change. An integrated approach is the key.

*Mr. Pavel Kabat*

	Vienna Energy Forum	Side Events	SE4ALL Events	
28. May 2013	<p><b>Opening Ceremony</b> 8.45 – 9.45 Grosser Redoutensaal</p> <p><b>Ministerial Segment I</b> 9.45-10.45 Grosser Redoutensaal</p> <p><b>High Level Panel I – Energy in the Post 2015 Agenda</b> 11.15-12.45 Grosser Redoutensaal</p> <p><b>Press Conference</b> 9.30 Mittlere Lounge</p>	<p><b>High Level Panel II – A New Action Agenda. High Level Group on SE4All</b> 14.30 – 16.00 Grosser Redoutensaal</p> <p><b>Plenary 1 – High Impact Opportunities</b> 16.30 - 18.00 Grosser Redoutensaal</p>	<p><b>Advantage Austria: Business Partnerships – an effective instrument for development cooperation</b> 14.30-16.00 Rittersaal</p> <p><b>EC Joint Research Centre: Creating and sharing knowledge together on African Renewable Energy Sources</b> 16.00-18.00 Mittlere Lounge</p>	<p><b>Launch of SE4All Tracking Framework Report</b> 14.30-15.30 Radetzky II</p> <p><b>Thematic Consultations on Energy</b> 16.30-18.00 Rittersaal</p>
29. May 2013	<p><b>Ministerial Segment II</b> 9.00 -10.00 Grosser Redoutensaal</p> <p><b>Plenary 2 – Energy and Green Growth</b> 10.00- 11.30 Grosser Redoutensaal</p> <p><b>Plenary 3 - Planning for Sustainable Cities</b> 11.30 - 13.00 Grosser Redoutensaal</p> <p><b>Parallel 1 – Energy Access</b> 14.30 - 16.00 Grosser Redoutensaal</p> <p><b>Parallel 2 – Energy Efficiency</b> 14.30-16.00 Rittersaal</p> <p><b>Parallel 3 - Renewable Energy</b> 16.30-18.00 Grosser Redoutensaal</p> <p><b>Parallel 4 – Technology Transfer and Innovation</b> 16.30-18.00 Rittersaal</p>	<p><b>GFSE : Sustainable Energy Solutions for All – Made in Austria</b> 9.00-11.00 Trabantenstube</p> <p><b>IIASA: Multiple Benefits of the Global Energy Transformation Recent Research Findings</b> 9.30-13.00 Künstlerzimmer</p> <p><b>IAEA: Promoting a Sustainable Energy Future: the Role of the International Atomic Energy Agency</b> 10.00-12.00 Mittlere Lounge</p> <p><b>EUEI PDF: Africa-EU Private Sector Cooperation: Matchmaking for win-win business opportunities in the renewables sector?</b> 11.30-13.00 Trabantenstube</p> <p><b>The Energy Future We Want – Including Water &amp; Food in the Energy Debate</b> 14.30-16.00 Radetzky II</p> <p><b>UNIDO/ECREEE: Regional Sustainable Energy Centers in Africa</b> 14.30 - 16.00 Trabantenstube</p> <p><b>UNIDO: Women's Leadership on Energy Justice in Productive Sectors</b> 15.00 - 17.00 + Drinks Künstlerzimmer</p> <p><b>ECREEE/UNIDO: ECOWAS Observatory for RE &amp; EE</b> 16.30 - 18.00 Trabantenstube</p>	<p><b>SE4All – Town Hall (closed)</b> 10.00 – 11.30 Radetzky II</p> <p><b>SE4All – Catalyzing Clean Energy Transformation Town Hall (closed)</b> 11.30 – 13.00 Radetzky II</p> <p><b>SE4All –Country Action Town Hall (closed)</b> 16.30 – 18.00 Radetzky II</p>	
30. May 2013	<p><b>Ministerial III</b> 9.00-10.00 Grosser Redoutensaal</p> <p><b>Plenary 4 – Financing the Energy Future We Want</b> 10.00-11.30 Grosser Redoutensaal</p> <p><b>Plenary 5 – Public and Private Partnerships</b> 11.30-13.00 Grosser Redoutensaal</p> <p><b>Closing Session</b> 13.30-14.30 Grosser Redoutensaal</p>	<p><b>Parallel 5 – Green Mini Grids Africa</b> 11.30-13.00 Rittersaal</p>	<p><b>SE4All – Stakeholder Engagement Panel</b> 10.00 - 11.30 Radetzky II</p>	



**1** **Grosser Redoutensaal**  
 - Main Plenary Hall

**2** **Kleiner Redoutensaal**  
 - Live Screening of Main Plenary Hall  
 - Evening Receptions

**3** **Trabantenstube**  
 - UNIDO/ECREE Side Event  
 - EUEI-PDF Side Event  
 - GFSE Side Event

**4** **Rittersaal**  
 - VEF Parallel Sessions  
 - Austrian Chamber of Commerce Side Event

**5** **Künstlerzimmer**  
 - IIASA GEA Side Event  
 - UNIDO Side Event on Gender and Energy Justice

**6** **Radetzky Apartment II**  
 - SE4All Side Event  
 - Water – Energy Nexus Side Event

**7** **Mittlere Lounge**  
 - EU Joint Research Centre Side Event  
 - Press Conference

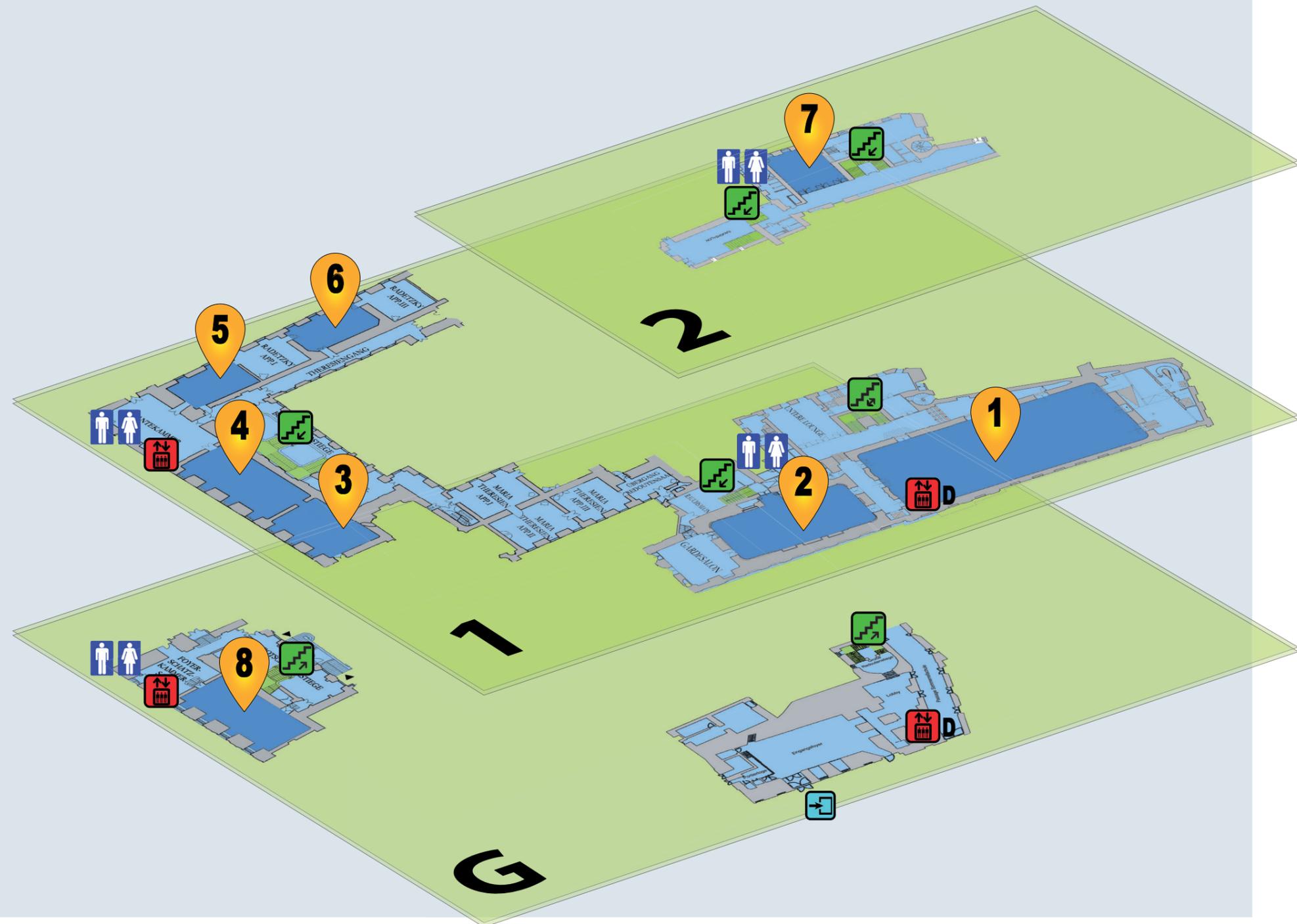
**8** **Schatzkammersaal**  
 - REEEP Project Managers Meeting

 HOFBURG Entrance – via Josephsplatz

 Staircase

 Lift/Elevator  
 (D = Dachfoyer Access)

 Bathrooms





## One year after Rio+20 – Are we on the Path to a Sustainable Energy future?

Access to clean, affordable energy is a cornerstone of green economy and sustainable development. The Rio+20 outcome document *The Future We Want* recognizes the critical role energy plays in sustainable development. Furthermore, the document emphasizes the need to address the challenge of access to sustainable modern energy services for all, in particular for the poor, who are unable to afford these services even if they are available, and the essential role of these services in social inclusion and gender equality.

Worldwide, about 1.4 billion have no access to electricity. Up to a billion more have access only to unreliable electricity networks. Almost 3 billion people rely on solid fuels (i.e. traditional biomass and coal) for cooking and heating. A well-performing energy system that improves efficient access to modern forms of energy would strengthen the opportunities for the poorest people on the planet to escape the worst impacts of poverty. Access to energy provides consumers with the means to generate income – and that in turn creates wealth and new markets. Yet the International Energy Agency predicts that in 2030 nearly as many people will lack modern energy services as do today.

While much of the developing world strives to find the means to address this huge deficit in access to modern energy, the world as a whole is struggling to shift

energy production and consumption towards cleaner and greener patterns to mitigate the effects of climate change and other environmental pressures. These twin forces will be shaping the post-2015 global sustainability agenda of the *Future We Want* and creating both, opportunities and challenges for all countries.

Perhaps the most critical challenge related to energy for sustainable development is how to increase and support ongoing access to affordable modern energy services, while also ensuring that these are provided in an efficient manner and do not cause adverse environmental and socioeconomic impacts. This point was well captured in the Secretary-General's *Vision Statement on Sustainable Energy For All*<sup>1</sup> (November, 2011), which highlighted the urgent and interconnected challenges related to energy services and called for a “transformation of the world’s energy systems that will benefit people everywhere”.

The United Nations General Assembly recently declared the years 2014 to 2024 to the Decade for Sustainable Energy for All. In adopting the resolution, the General Assembly reaffirmed its determination to make sustainable energy

<sup>1</sup> *Sustainable Energy for All: A Vision Statement by Ban Ki-moon, the Secretary-General of the United Nations. United Nations. November, 2011*

for all a reality. The text calls upon Member States to galvanize efforts to make universal access to sustainable modern energy services a priority, noting that 1.3 billion people are without electricity and 2.6 billion people in developing countries rely on traditional biomass for cooking and heating. It expressed concern that even when energy services are available, millions of poor people are unable to pay for them.

The Vienna Energy Forum (VEF) has established itself as a leading forum for policy makers and energy practitioners on the issues of sustainable energy for development. The Forum is committed to advancing the global dialogue on sustainable energy by engaging governments, international organization, business and industry and civil society leaders to shape global, regional and industry agendas on sustainable energy for all.

One year ago at the Rio+20 Conference, the world leaders had agreed on the outcome document “*The Future We Want*”<sup>2</sup>, where commitments were made to “act and to make a sustainable energy for all a reality”. Organized one year after the Rio+20 Summit, the 3rd Vienna Energy Forum (VEF 2013) is focus on the energy dimensions of the Rio+20 outcomes and is providing a high

<sup>2</sup> *Report of the United Nations Conference on Sustainable Development, Rio de Janeiro, 20-22 June 2012, United Nations, A/Conf.216/16*

level platform for discussing the following key issues and themes:

- **Sustainable Energy for All Vision:** Are we on the right track to achieve sustainable energy for all by 2030?
- **Energy in post-2015 Agenda:** How can it be best integrated into the global development framework and linked to other development issues (i.e. environment, poverty, health, education, gender equality, etc...?)
- **Do we need a Sustainable Development Goal (SDG) for the energy sector?** Can the three targets of SE4All ( universal access to modern energy services, doubling share global rate of energy efficiency and doubling the share of renewable energy in global energy mix) support the post-2015 Sustainable Development Goal for Energy?

- **What are the key drivers for new energy financing?** The global investment in renewable energy continues on the positive trend: whatever the drivers are, how this trend can be sustained and what is the latest status of technologies and innovations?
- **What can we do** to make sure that we move from vision to practical action, from commitments for kilowatt hours of clean, affordable energy on the ground in countries where it is needed most?
- **What policies and partnerships are needed** to bring us to a sustainable energy future?





## Global Thematic Consultations: The Post-2015 Development Agenda and the Energy Future We Want for All

Building on the commitments, expressed at the Rio+20 Conference “to act to make sustainable energy for all a reality and, through this, help to eradicate poverty and lead to sustainable development and global prosperity,” the recently-concluded Global Thematic Consultations on Energy held a truly transparent, multi-stakeholder, global dialogue on why and how energy should be addressed in the United Nations post-2015 Development Agenda<sup>3</sup>.

The consultations process had culminated with a High Level Dialogue on Energy in the Post-2015, hosted by the Government of Norway in Oslo last month. Co-convended by Tanzania, Norway and Mexico and supported by the Sustainable Energy for All Initiative, UNIDO, UN DESA and the World Bank, the Consultations were conducted through a web-based process and the face-to-face meetings held in Africa, Asia, Europe, North America, Latin America and Arab Region.



The dialogue has demonstrated the universal support for the centrality of energy in the post-2015 sustainable development agenda. The post-2015 development agenda must therefore explicitly recognize the important role energy plays in achieving sustainable development.

Many participants recognized that achieving sustainable energy for all will involve the development of energy systems that support the optimal use of energy resources in an efficient, equitable and socially inclusive manner while minimizing environmental impacts:

- **Providing universal access** to modern energy, including clean cooking facilities, is essential for poverty reduction, equitable, inclusive growth. Achieving access should therefore be open to the sustainable development of all sources, depend on a mix of solutions, for example micro-grid, decentralized and centralized energy solutions, and prioritized according to countries' specific challenges, capacities and circumstances, with an emphasis on the interlinked issues of availability, affordability and quality.

- **Investing in energy efficiency** will enhance economic opportunities while creating local jobs. Resources used more effectively could contribute to a better environment, increased quality of life, economic growth, lower energy costs for consumers, redistribution of electricity that now is wasted or lost, and create more reliable electricity systems.

- **Increasing the share of energy from renewable sources** can reduce greenhouse gas emissions and local pollution, insulate countries from fuel price volatility, and improve their balance of payments, while creating local jobs and growth and improve energy security for countries that lack domestic fossil resources.

### High Level Panel I 11.15 – 12.45 Grosser Redoutensaal

#### Energy in the post-2015 policy debate: Rio+20 Outcome Document and Roadmap to 2030

The issue of energy is central to all three strands of sustainable development: economic growth, expanded social equity, and the preservation of our climate and

environment. Without access to sustainable and modern energy, it is not possible to achieve the Millennium Development Goals and realize sustainable development. The post-2015 development agenda must therefore explicitly recognize the important role of energy. Universal energy access, increasing the use of renewable energy, improved energy efficiency and the need to address the nexus between energy and other development factors are priority issues that must be addressed

*This High Level Panel will frame the discussion on how energy should be considered in the post-MDG development framework.*

#### QUESTIONS FOR DISCUSSION:

- What are the priority issues that we must address as part of the post-2015 global development agenda?
- How can energy be best integrated in the post-2015 development framework and linked to other development issues, such as climate change, gender, etc.?
- Should there be a Millennium Development Goal (SDG) for energy? Could “Sustainable Energy for All goals be the SDGs for the energy sector?”

### High Level Panel II 14.30 – 16.00 Grosser Redoutensaal

#### A New Action Agenda – High Level Group on Sustainable Energy for All

Recognizing the importance and urgency of energy challenges, the Secretary-General, launched in 2011 the initiative “Sustainable Energy for All” that seeks to identify and mobilize action by all stakeholders in support of access to modern energy services. A Global Action Agenda<sup>4</sup> prepared by the High Level Group on Sustainable Energy for All, outlined a roadmap and a framework for action for high impact opportunities to drive the transformation process

in support of the three specific objectives underpinning the sustainable energy for all by 2030 goal: (1) ensuring universal access to modern energy services; (2) doubling the share of renewable energy in the global energy mix; and (3) doubling the rate of improvement in energy efficiency.

Realizing the objectives of Sustainable Energy for All will require a decisive shift away from the “business as usual” mode in the energy sector. The Vienna Energy Forum 2013 will discuss the sustainable energy for all action agenda as captured by the Secretary-General Initiative (SE4All) Global Action Agenda document, which identifies opportunities for stakeholders to engage in concrete areas of action, ranging from appliance efficiency to innovative finance. The Action

Agenda highlights the implementation roadmap and a set of concrete targets and objectives (energy access, energy efficiency and renewable energy) that support the goal of universal energy access by 2030. As such, it creates a platform for beneficial synergies between developed and developing nations as well as institutions.

#### QUESTIONS FOR DISCUSSION:

- Why do we need a new Global Action Agenda and what makes this Agenda different?
- Can we end energy poverty by 2030 and double the share of renewable energy in the global energy mix?
- Can we double the rate of energy efficiency improvements?
- What are the necessary financial requirements for the Agenda for Action and how can they be realized?
- Which commitments and actions have been agreed upon by governments?
- What role should the private sector have in this Initiative

<sup>3</sup> <http://www.worldwewant2015.org/energy2015>

<sup>4</sup> Sustainable Energy For All. A Global Action Agenda: Pathways for Concerted Action Towards Sustainable Energy for All. High-Level Group on Sustainable Energy for All. United Nations, April, 2012.



**Special Event:**  
14.30 – 15.30  
Radetzky II

**Launch of SE4All Global Tracking Framework (in parallel)**

As the Millennium Development Goals process demonstrates, measurable goals that enjoy widespread consensus can mobilize commitments to action, strategic partnerships and widespread support from key stakeholders and whole societies. For many, the Sustainable Energy for All initiative (SE4ALL) illustrates what a Sustainable Development Goal for the energy sector would look like. But setting goals is not enough. Measuring and reporting on progress is critical to achieving them. The SE4ALL Global



Tracking Framework Report serves this purpose. Prepared by a team of energy experts from 15 agencies under the leadership of the World Bank and the International Energy Agency, the report provides a comprehensive snapshot of over 170 countries' status with respect to action on energy access, energy efficiency and renewable energy, as well as energy consumption. The report's framework for data collection and analysis enables us to identify "high-impact" countries with the most potential to achieve rapid progress towards the SE4ALL objectives, and also to monitor that progress from now to 2030.

The launch of the Tracking Framework Report will take place as a Special Event of the Forum. A panel of distinguished participants representing multi-agency team that prepared the Report will present and discuss the Report methodology, findings and related issues, including how the Report will help to measure and report progress on achieving the Sustainable Energy for All goals by 2030.

*The panel will present the Global Tracking Framework report and discuss its methodology, findings and related issues:*

- How will the Global Tracking Framework Report measure progress on energy access, energy efficiency and renewable energy?
- What are the main findings of the report?
- How can countries act on the report's findings to boost progress towards sustainable energy?

**Plenary Session 1**  
16.30 – 18.00  
Grosser Redoutensaal

**Framework for Action – High Impact Opportunities**

The Global Action Agenda identified a number of high-impact

opportunities which will foster positive outcomes in extending and expanding energy access to promote the adoption of sustainable energy. While achieving the two UN SE4All objectives is challenging, they are attainable and affordable if they are pursued in a concerted action across key sectors, such as industry, transport, buildings and power sectors.



**Special Event:**  
16.30 – 18.00  
Rittersaal

**Thematic Consultations on Energy (in parallel)**

The UN Secretary-General's Sustainable Energy for All Initiative recently launched the Post-2015 Global Thematic Consultation on Energy, in partnership with the Governments of Mexico and Norway and the support of UN-Energy, the United Nations Department of Economic and Social Affairs (UNDESA), the United Nations Industrial Development Organization (UNIDO), the United Nations

Development Programme (UNDP) and the World Bank. From January to April 2013, a series of active online discussions and inperson events took place around the world to gather ideas, views and recommendations on the role of energy in creating the future we want.

The four months dialogue on why and how energy should be addressed in the post-2015 development agenda, culminated in a "High Level Dialogue on Energy in the Post-2015 Development Agenda" took place in Oslo, Norway on 9 April, 2013. Hosted by the Government of Norway and coconvened by the Governments of Mexico, Norway and Tanzania.

**QUESTIONS FOR DISCUSSION:**

- Why does energy matter, what are the challenges/opportunities, and what can we do about it? Looking at Energy as an important element of global efforts to induce a paradigm shift towards poverty eradication, green economies and ultimately sustainable development.
- In what way(s) can stakeholders and the UN system take action to advance a more integrated approach to energy within the post-2015 development framework?
- What are some of the global goals, targets and indicators on energy that may be proposed for the post-2015 process?
- Are there specific processes or forms of engagement that would help to ensure that energy issues are well reflected in post-2015 processes?



## Plenary Session 2

10.00 – 11.30

Grosser Redoutensaal



### Energy and Green Growth

Productive use of materials, water and other resources in society is an important lever to a low carbon and low energy future. Its economic opportunity has been estimated at nearly 3 trillion USD annually in 2030. Resource efficiency has become the engine of green growth. A number of techniques have widespread applicability in multiple sectors and deserve greater recognition

and support as platform technologies, including for example green chemistry. The panel will debate some of these cross-sectoral opportunities. Moreover, complementary policy frameworks and multi stakeholder initiatives will be discussed with a view to mobilize green growth opportunities for the realization of the Energy for All policy goals.

*The panel will debate some of these cross-sectoral opportunities. Moreover, complementary policy frameworks and multi stakeholder initiatives will be discussed with a view to mobilize green growth opportunities for the realization of the Energy for All policy goals.*

#### QUESTIONS FOR DISCUSSION:

- What are the key cross-sectoral opportunities present in selected industries for the attainment of Green Growth?
- Which role could national governments, industry, academia and multilateral institutions play in the implementation of green growth technologies and services?
- What incentives at the policy level are required to promote the greening of global value chains?
- Should the resource efficiency indicators discussion be a central element in the ongoing process for the development of Sustainable Development Goals (SDGs)?

creating jobs and prosperity without straining land and resources. Cities around the world are taking action to address climate change and to enhance energy and resource efficiency to create a sustainable environment for their citizens. This panel will provide a platform for a dialogue on planning for sustainable cities and an opportunity to share knowledge, experience and future action plans.



The 3rd Vienna Energy Forum (VEF2013) engages business, governments, international organizations and civil society leaders in a broad dialogue on sustainable cities and how new energy models could be used to advance urban sustainability objectives.

*This panel will provide a platform for a dialogue between experts and an opportunity to share knowledge, experience and future action plans.*

#### QUESTIONS FOR DISCUSSION:

- How can we provide access to clean energy and clean water for everyone, and make sure that the energy we produce does not contribute to climate change?
- What role is there to play for the private sector? How can we plan our cities to build better transport systems to avoid congestion and pollutions?
- How do we manage and recycle waste to build a clean and healthy environment for all?

## Plenary Session 3

11.30-13:00

Grosser Redoutensaal



### Planning for Sustainable Cities

At Rio+20 Conference, Member States recognized that integrated planning and management approaches to planning and development of cities can “promote economically, socially and environmentally sustainable societies”. In this regard, the Rio+20 outcome document calls for a “holistic approach to urban development and human settlements” that provide affordable housing and infrastructure, while also promoting

conservation and national and cultural heritage. Leaders committed to work together to promote among other things, the integrated approach to city planning, sustainable transport and energy and air quality.

Cities have the potential to play a leadership role in promoting new solutions and driving global action on green growth. Many challenges exist for cities to maintain a way of continuously

## Parallel Session 1

14:30-16:00

Grosser Redoutensaal

### Energy Access

Nearly one in five people around the world do not have access to modern energy services. Modern economies are driven by energy; a lack thereof is detrimental to progress and stunts the growth of a nation. Lack of access to energy in rural areas is one of the major barriers to eradicating poverty. In the backdrop of the Sustainable Energy for All goals, providing universal

energy access is challenging but it is feasible. One of the major challenges is faced in providing access to energy to rural communities living in off-grid areas. Renewable energy technologies such as micro hydro, smart mini grids and solar cells are proven technologies that have provided access to energy in several off-grid rural areas. A stable policy framework backed by strong political will and resources is necessary to catalyze action towards achieving energy access for all. Mainstreaming the energy access agenda into national policy, regional policy and the long term national objectives is critical for sustainable economic growth.



*This session will discuss key challenges in meeting the needs of those who lack access to electricity and clean fuels to light their homes, cook their food and run their businesses.*

#### QUESTIONS FOR DISCUSSION:

- What is the scale of required investment?
- How to make clean energy solutions universally affordable?
- How can national policies contribute towards creating a cost-effective and affordable energy market for those in need?
- Partnerships and networks that can support practical action?
- What is the role of civil society and private sector?



**Parallel Session 2**  
14:30-16:00  
Rittersaal

**Energy Efficiency**

Energy efficiency is widely recognized as the most fundamental short-run imperative for rapid, ambitious and cost-effective climate change mitigation and global transition to green growth. Despite decades of laudable efforts the uptake of energy efficiency in many parts of the world is not occurring on the scale and at the speed necessary



to meet energy security, energy access and climate change goals. As there remains significant room for improvement in terms of efficiency worldwide, all countries should contribute to this effort. The challenge is to build momentum towards a self-sustaining, accelerated progress in energy efficiency.

*This session will discuss ways forward to prioritize global action on energy efficiency and explore options for addressing energy efficiency as part of the new global development framework, covering a wide array of economic sectors, including industrial, residential, commercial and transport.*

**QUESTIONS FOR DISCUSSION:**

- What are key issues in scaling up the deployment of energy efficiency?
- What are the lessons learned thus far from the implementation of such programs?
- How to trigger action by the private sector?
- Can we double the rate of energy efficiency improvement by 2030?
- What are the financial requirements for achieving this goal and how can we mobilize investments

**Parallel Session 3**  
16:30-18:00  
Grosser Redoutensaal

**Renewable Energy**

Renewable energy in current economic times can spur growth opportunities and increase productivity of human capital for green growth



and green jobs. Latest estimates indicate that about 5 million people worldwide work either directly or indirectly in the renewable energy industries. This makes renewable energy not only a critical element of the global solution to climate change but also a key instrument to achieve sustainable development through new green jobs, the development of the local economy, the increased competitiveness of local industries and the reduction of environmental impacts. Recent studies show that renewable energy is often the cheapest solution for off grid solutions in many developing countries and when linked to productive activities can act as an engine for local development.

*This session will explore the notion that in emerging and developing countries successful energy policies need to emphasize the importance of small-scale (i.e. under 10 MW) and decentralized energy systems to maximize the sustainable development dividends.*

**QUESTIONS FOR DISCUSSION:**

- How can the local population and local enterprises become the main actors and beneficiaries of the new energy paradigm centred in the deployment of renewable energy?
- How can the potential of renewable energy in developing countries to maximize their sustainable development dividends be unlocked?
- How can isolated minigrids, industrial applications and distributed solutions be effectively promoted and deployed.
- What is the role of international organizations in achieving a paradigm shift towards wide-scale deployment of small-scale renewable energy systems?

**Parallel Session 4**  
16:30-18:00  
Rittersaal

**Technology Transfer and Innovation**

Sustainable Development on a global scale will require radical technological changes in both developed and developing countries. Spurring innovation, as well as accelerating the deployment, diffusion and transfer of best-practice technologies is key to shifting towards a green economy. Green technologies are central to resource management, and touch upon virtually all economic sectors, including agriculture, transport and industry.

*This session will address special challenges of transferring environmentally-sound technologies to address global energy and resource challenges in the context of sustainable development.*

**QUESTIONS FOR DISCUSSION:**

- What is the role of the UN in fostering technology transfer and innovation? And how to best integrate all efforts of UN agencies in this regard?
- How can the private sector create new and energy-efficient technologies while keeping prices affordable for developing countries? Can the UN help?
- What is the role of the Montreal Protocol in the transfer of energy-efficient technologies? How does it differ from the UNFCCC and the GEF?
- What are main sectors where technology transfer and innovation may lead to energy savings?
- To what extent can the phase-down of HFCs lead to energy savings? And what is the role of technology transfer in the global phase-down of HFCs?





**Plenary Session 4**  
10.00 – 11.30  
Grosser Redoutensaal

**Financing the Energy Future We Want**

Annually billions of dollars are needed to finance a sustainable energy future and meet the goals of SE4ALL by 2030. This session will discuss key issues and challenges in developing financial solutions for sustainable energy investments. The magnitude of necessary resources makes it evident that the solution

requires innovative policies such as feed-in-tariffs and new mechanisms. Financing a sustainable energy future calls for high upfront investment costs that are offset in the long run by multiple benefits. The role of global financial mechanisms such as GEF and GCF will become critical in years to come as they can facilitate in catalyzing public and private financing for programs on Sustainable Energy For All.



**QUESTIONS FOR DISCUSSION:**

- *Subsidy or Grant? In times of economic recession, do national governments need to critically analyze how to maximize the impact on their funding?*
- *What role can GEF and GCF play in catalyzing public and private sector financing?*
- *Have feed-in-tariffs worked and is their reach broad enough? What are the other financial innovations that can help financing the transition to green economies?*

**Plenary Session 5**  
11.30-13 :00  
Grosser Redoutensaal

**Public Private Partnerships**

Public-Private Partnerships (PPPs) is a *policy instrument of choice* to develop and implement development projects and initiatives that neither private nor public sector could undertake on their own. This is particularly true in the energy and infrastructure sector, where PPPs are critical for providing service in an efficient way and developing best practices and frameworks that promote investment. In his Vision

Statement on SE4All, the Secretary-General called upon all sectors of society to act to join the initiative with concrete commitments to actions and practical solutions. To achieve a bright future of SE4All - business, finance, government, and civil society – all need to embrace the need for energy transformation and get engaged.

The Rio+20 outcome document “The Future We Want” – repeatedly highlights the importance of PPPs as a policy tool for engagement of business and industry to advance sustainable development priorities and for mobilizing financing. It also commends the existing PPPs and calls for new and innovative PPPs

among industry, academia, governments and non-governmental stakeholders. As such, PPPs will remain an important tool in the post-2015 policy portfolio. The Vienna Energy Forum 2013 supports initiatives and PPPs to advance renewable energy, energy efficiency and universal access to sustainable energy by 2030.

**QUESTIONS FOR DISCUSSION:**

- *What are the key areas for public-private partnerships to achieve the SE4ALL goals?*
- *How can multilateral organizations adapt in order to facilitate partnerships with the private sector?*

**Parallel Session 5**  
11.30 - 13.00  
Rittersaal

**Green Mini-Grids Africa – Sector Transformation Towards Sustainable Energy For All**

What is the role of mini-grids in increasing access to clean energy solutions? The IEA has estimated that in order to achieve universal electricity access, mini-grids will have to provide

around 40% of new capacity by 2030<sup>5</sup>, with the largest percentage needed in sub-Saharan Africa. While green mini-grid options exist they have struggled to expand beyond pilot projects and are off-track to make a meaningful contribution to Sustainable Energy for All targets. However, as new smart grid technologies and renewable energy cost reductions make systems more viable - and as demand increases from anchor customers like expanding mobile telecoms firms concerned

<sup>5</sup> *Energy For All-Financing access for the poor, OECD/IEA, 2011*

about rising diesel prices - there is increasing public and private interest in renewable and hybrid mini-grid systems. A substantial African green mini-grids sector could complement grid expansion and household energy delivery, and help countries leapfrog to more resilient and sustainable energy systems. This session seeks to bring together donors, governments, private developers, community organizations and international organizations in order to narrow in on a co-ordinate SE4ALL approach to green mini-grid sector transformation in Africa.

**Adoption of VEF 2013 Declaration “Energy Goals Beyond 2015**  
13:30-14:30  
Grosser Redoutensaal

**What should the Forum achieve? Key expectations for the outcome**

With less than three years remaining until the 2015 deadline to achieve the Millennium Development Goals (MDGs), it is clear that the debate on post-2015 needs to shift to the discussion of concrete instruments and goals to improve efficiency and address the right fields for action. In this regard, global attention is now focused on a new round of goals, i.e. the Sustainable Development Goals (SDGs).

The Rio+20 Summit produced an outcome document - ‘The Future We Want’ - where the issues that should guide the SDG process were outlined.

While some of the SDGs are expected to build on the existing MDGs, such as poverty reduction, gender, education and developing a global partnership, it is clear that some additional goals will have to be proposed to address the growing urgency of sustainable development and some of its new challenges, such as energy and climate change.

Seen more like the emerging challenges in the 90s and 2000s, when the MDGs were implemented, energy and climate are now recognized as the major, defining issues of our time. Therefore, the post-2015 framework should put in place a clearly-articulated global long-term goal on energy, such as for example, the universal energy access goal supported by short-term targets and a robust monitoring and reporting system.

Building on the outcomes and recommendations of the Global Thematic Consultations on Energy, the Vienna

Energy Forum 2013 will provide a platform for a discussion on an inspirational goal on energy that will help to focus attention, drive action and financing towards the global transition to sustainable energy for all.

It is expected that the Outcome Document will serve as a message from the Forum to reinforce the growing political momentum that already endorsed sustainable energy for all as a development priority for the post-2015 supported by a emphasize the necessity of establishing a “sustainable energy for all” as a global goal on energy.

It is expected that the Outcome Document will be developed as a result of the Forum proceedings and will not be a negotiated document, but rather a joint statement or a set of messages that will reflect the conclusions and recommendations expressed by the participants of the thematic sessions and side events.



## Energy Targets embedded in other SDGS ?

As Thematic Consultations on Energy and the Post-2015 Development Agenda demonstrated, for many, the Sustainable Energy for All Initiative (SE4ALL) illustrates what a Sustainable Development Goal for the energy sector would look like. Meanwhile, should energy be embedded in other future SDGs as access to energy serves as a precondition to achieve many development goals that extend far beyond the energy sector—eradicating poverty, increasing food production, providing clean water, improving public health, enhancing education, creating economic opportunity, and empowering women. Emissions of greenhouse gases from fossil fuels are contributing to changing the Earth's climate to the detriment of all. At the same time, the transition

to sustainable energy systems presents one of the greatest investment opportunities of the 21st century. Development is not possible without energy, and sustainable development is not possible without sustainable energy.

The experience with the Millennium Development Goals clearly demonstrated that a development framework based on clearly-articulated goals and targets helps to mobilize political will and commitments and drive action towards long-term priorities and objectives. The Rio+20 outcome launched an inclusive intergovernmental process to formulate Sustainable Development Goals (SDGs).

Do we need an SDG for the energy sector as part of the post-2015 development framework? Early analysis and options, - including those expressed in the context of the recently-concluded global thematic consultations on energy - show broad support for establishing a global goal on energy to achieve real traction as part of the post-2015 framework.

This global energy goal and related target(s) should encompass all three dimensions of sustainable development: social, economic and environmental development. The Secretary-General's Sustainable



Energy for All initiative, with its three objectives on access, efficiency and renewables, can provide a useful framework to this end.

The Vienna Energy Forum 2013 will provide a platform for debating this question. The views and conclusions of the Forum will be captured in its Outcome document, which will serve as an input to the global debate on Sustainable Development Goals (SDG) and the energy goal among them.



## Nexus Issues in the Post-2015 Policy Portfolio: Water, Food and Energy.

There are increasing calls globally to include water and food in the energy debate as nations around the world develop new energy policies and evaluate the options they want to follow in response to the UN Secretary-General's Initiative on Sustainable Energy for All (SE4All). The inclusion of water and food in the energy debate is relevant as

energy decisions have a broad range of impacts on water and food production. For example, novel water and energy policies in agriculture could enhance food production and security. However, abstracting water for irrigation may affect reservoir levels and reduce hydropower capacity, with negative consequences for energy security. The

water-energy-food nexus presents opportunities for policy-makers, business leaders, investors, non-governmental organizations and the public at large to manage dwindling resources that are important for addressing important global development challenges.

## Gender and Energy in the Post-2015 Agenda

Policy research clearly demonstrates that energy poverty is felt most acutely by women and girls who, as an example, bear the responsibility to collect wood, coal, animal or crop waste as energy sources. Exposure to smoke from hazardous methods of cooking, heating, and lighting kills nearly two million people annually, mostly women and children, and millions more suffer from exposure-related diseases<sup>6</sup>. Gender therefore should be considered as one of the key variable in energy policy that can support the transformation to the sustainable future we want. Without access to modern forms of energy, sustainable development cannot be achieved and gender plays a

<sup>6</sup> <http://www.who.int/indoorair/info/briefing2.pdf>

critical role in explaining these linkages. Greater efforts are needed to re-thinking the gender and energy paradigm and develop new approaches to gender and energy policies in the post-2015 development framework.

The debate on energy and gender has so far primarily focused on women's domestic roles addressing household needs such as increased access to energy efficient stoves or alternative cooking fuels. There is a need to take the discussion beyond the 'household door' recognizing women as key economic actors and promoting their empowerment to ensure they are active participants and leaders in the energy sector. Involving women in the various steps of the energy value chain has

the potential of promoting women's economic empowerment by generating employment opportunities, promoting entrepreneurship and increasing their chance of escaping multiple forms of poverty.

Under the theme "Women's leadership on energy justice in the productive sectors", the 3rd Vienna Energy Forum will provide an important platform to share experiences and explore options on how to more effectively promote and enhance the role of women as active participants in energy policy-making, as well as their leadership role as sustainable energy managers and producers. It will also discuss the mutually reinforcing goals of gender equality and universal energy access.



<b>8.45 – 9.00</b>	<b>Welcome Address – Grosser Redoutensaal</b>
<b>Panelists</b>	H.E. Mr. Michael Spindelegger, Vice Chancellor and Foreign Minister of Austria Mr. Pavel Kabat, Director and Chief Executive Officer Mr. Kandeh Yumkella, Director General, UNIDO
<b>09.00 – 09.15</b>	<b>Musical Presentation by the Vienna Philharmonic Orchestra, IIASA Goodwill Ambassador: Joseph Haydn: String Quartet D-Major Op. 64/5 "The Lark"</b>
<b>09.15 – 09.45</b>	<b>Opening Speeches – Grosser Redoutensaal</b>
	Mr. Chad Holliday, Chairman, Bank of America Ms. Renate Brauner, Vice-Mayor and Vice-Governor of the City of Vienna Message from the United Nations Secretary-General, Mr. Ban Ki-moon Message from the Director General of the OFID, Mr. Suleiman Jasir Al-Herbish
<b>09.30</b>	<b>Press Conference (in parallel)</b>
<b>09.45 – 10.45</b>	<b>Ministerial and High-Level Dignitaries Segment – Grosser Redoutensaal</b>
<b>Moderator</b>	Ms. Nisha Pillai, BBC
	H.E. Mr. Suhail Mohamed Almazroui, Minister of Energy of the United Arab Emirates H.E. Mr. Heikki Holmås, Minister of International Development of Norway H.E. Mr. Edison Lobão, Minister of Mines and Energy of Brazil H.E. Ms. Mariyam Shakeela, Minister of Environment and Energy of the Maldives H.E. Mr. Lihua Liu, Vice Minister of Industry and Information Technology of China H.E. Mr. Peter Thomson, Permanent Representative of Fiji to the United Nations New York and Chairman of the G77
<b>10.45 – 11.15</b>	<b>Coffee and Tea Break</b>
<b>11.15 – 12.45</b>	<b>High Level Panel I: Energy in the Post-2015 Agenda – Grosser Redoutensaal</b>
<b>Moderator</b>	Ms. Nisha Pillai, BBC
<b>Panelists</b>	Mr. Sven Alkalaj, Under-Secretary-General and Executive Secretary of the United Nations Economic Commission for Europe, UNECE Mr. Adnan Amin, Director General, IRENA Mr. Jose Goldemberg, Board Member, Sustainable Energy Institute Ms. Rachel Kyte, Vice President, Sustainable Development, The World Bank Mr. Gerhard Roiss, Chief Executive Officer, OMV Ms. Elizabeth Thompson, Executive Coordinator for the UNCSD Rio + 20 Conference Mr. Halil Yurdakul Yigitgüden, Coordinator, Co-ordinator of Economic and Environmental Activities, OSCE
<b>12.45 – 14.30</b>	<b>Lunch hosted by OFID and IIASA (by invitation only at Dachfoyer)</b>

<b>14.30 – 16.00</b>	<b>High Level Panel II: A New Action Agenda – High Level Group on Sustainable Energy for All – Grosser Redoutensaal</b>
<b>Moderator</b>	Ms. Nisha Pillai, BBC
<b>Panelists</b>	Mr. Alexander Bychkov, Deputy Director General, IAEA Mr. Jérôme Ferrier, President, International Gas Union Mr. Victorio Oxilia, Executive Secretary, OLADE Mr. N.P. Singh, Adviser, Ministry of New and Renewable Energy of India Mr. Andrew Steer, President and CEO, World Resources Institute Mr. Mohammed Taeb, Environmental Coordinator, OPEC
<b>14.30 – 15.30</b>	<b>Special Event: Launch of the SE4ALL Global Tracking Framework parallel at Radetzky Apartment II</b>
<b>Moderator</b>	Mr. Kandeh K. Yumkella, Director General, UNIDO
<b>Panelists</b>	Ms. Rachel Kyte, Vice President, Sustainable Development, World Bank Mr. Dan Dorner, Economist and Analyst, International Energy Agency Ms. Vivien Foster, Sector Manager, Sustainable Energy, World Bank Mr. Simon Trace, Executive Director, Practical Action
<b>16.00 – 16.30</b>	<b>Coffee and Tea Break</b>
<b>16.30 – 18.00</b>	<b>Special Event: Thematic Consultations on Energy parallel at Rittersaal</b>
<b>16.30 – 18.00</b>	<b>Plenary Session 1: Framework for Action – High Impact Opportunities – Grosser Redoutensaal</b>
<b>Moderator</b>	Ms. Leena Srivastava, Executive Director, The Energy and Resource Institute
<b>Panelists</b>	Mr. Albert Binger, Energy Science Advisor, Caribbean Community Climate Change Centre Mr. Christoph Frei, Secretary General, World Energy Council Ms. Helen Mountford, Deputy Director, OECD Mr. Nebojsa Nakicenovic, Deputy Director, IIASA and Professor of Energy Economics, Technical University of Vienna Mr. Ebrima Njie, ECOWAS Commissioner for Infrastructure Mr. Albrecht Reuter, Member of the Board, Fichtner IT Consulting Mr. Arthouros Zervos, Chair of REN21 and CEO and President Public Power Corporation
<b>18.00</b>	<b>Reception hosted by EnDev and Partnership</b>



08.30 – 09.00	Summary of the Previous Day by Mr. Ged Davis, President, Forescene S. A
09.00 – 10.00	<b>Ministerial and High Level Segment – Grosse Redoutensaal</b>
Moderator	Mr. Ged Davis, President, Forescene S. A.
	H.E. Mr. Marcin Korolec, Minister of Environment of Poland H.E. Mr. Sospeter Muhongo, Minister of Energy and Minerals of Tanzania H.E. Mr. Ahmed Mostafa Emam, Minister of Electricity and Energy of Egypt H.E. Mr. Sok Siphana, Advisor of the Royal Government of Cambodia Ms. Datuk Loo Took Gee, Secretary General of the Ministry of Energy, Green Technology and Water of Malaysia Mr. Raúl García Barreiro, Deputy First Viceminister of the Ministry of Energy and Mining of the Republic of Cuba
10.00 – 11.30	<b>Plenary Session 2: Energy and Green Growth – Grosse Redoutensaal</b>
Moderator	Mr. Paul Hohnen, Founder and Managing Director, Sustainability Strategies
Panelists	Ms. Jacqueline Cramer, Director, Utrecht Sustainability Institute Mr. Lambert Kuijpers, Co-Chair, Technology and Economic Assessment Panel of the Ozone Secretariat Mr. Heinz Leuenberger, Director, Environmental Management Branch, UNIDO Mr. Mark Radka, Head of Energy Branch, UNEP Mr. Arthur Reijnhart, General Manager, Alternative Energy Strategy, Shell
11.30 – 13.00	<b>Plenary Session 3 – Planning for Sustainable Cities – Grosse Redoutensaal</b>
Moderator	Mr. Joan Clos, Executive Director, UN HABITAT
Panelists	Mr. Eddie Bet Hazavdi, Director, Department of Energy Conservation at Ministry of Energy and Water of Israel Ms. Brigitta Huckestein, Senior Manager, Communications & Government Relations Energy and Climate Policy, BASF Group Ms. Carina Lakovits, Advisor, International Financial Institutions, Austrian Ministry of Finance Mr. Raj Liberhan, Director, India Habitat Centre New Delhi Mr. Thomas Madreiter, Director of the Urban Planning, City of Vienna Mr. Franz-B. Marré, Head of Division of Water, Energy, Urban Development and the Geoscience Sector, Federal German Ministry for Economic Cooperation and Development Mr. Marcos Pontes, UNIDO Goodwill Ambassador
13.00 – 14.30	Lunch hosted by GEF and UNIDO (by invitation only at Dachfoyer) Keynote by Ms. Naoko Ishii, Chief Executive Officer and Chairperson, GEF

14.30 – 16.00	<b>Parallel Session 1 – Energy Access – Grosse Redoutensaal</b>
Moderator	Mr. Vijay Modi, Professor of Mechanical Engineering, Columbia University
Panelists	Mr. Jan Dictus, GOJA Consulting for Environment and Sustainable Development Mr. Wolfgang Engshuber, Chairman, Principles for Responsible Investment Mr. Michael Kelly, Deputy Managing Director, World LP Gas Association Ms. Richenda Van Leeuwen, Director, Energy Access Initiative, United Nations Foundation Mr. Pradeep Monga, Director, Energy and Climate Change, UNIDO Mr. Lucius Mayer-Tasch, Energy Advisor, GIZ Ms. Mary Robinson, UN Special Envoy for the Great Lakes Region of Africa
14.30 – 16.00	<b>Parallel Session 2 – Energy Efficiency – Rittersaal</b>
Moderator	Mr. Luis Gomez-Echeverri, Senior Research Scholar, Transition to New Technologies, IIASA
Panelists	Mr. Odón de Buen, Director General, Mexican National Commission for the Efficient Use of Energy Mr. Mark Hopkins, Energy Efficiency Expert, United Nations Foundation Ms. Doris Österreicher, Head of Business Unit Sustainable Building Technologies, Austrian Institute of Technology Ms. Marina Ploutakhina, Industrial Energy Efficiency, Unit Chief, UNIDO Mr. Jigar V. Shah, Executive Director, Institute for Industrial Productivity Mr. David Shropshire, Section Head, Planning and Economic Studies Section, IAEA
16.00 – 16.30	Coffee and Tea Break
16.30 - 18.00	<b>Parallel Session 3 –Renewable Energy as a Tool for Sustainable Development – Grosse Redoutensaal</b>
Moderator	Ms. Christine Lins, Executive Director, REN 21
Panelists	Mr. Gábor Baranyai, Deputy State Secretary, Ministry of Foreign Affairs of Hungary Mr. Martin Hiller, Director General, REEEP Mr. Mahama Kappiah, Executive Director, ECREEE Mr. Diego Masera, Unit Chief, Renewable and Rural Energy Unit, UNIDO H.E. Ms. Brigitte Öppinger-Walchshofer, Managing Director, Austrian Development Agency Mr. Jorge Samek, Director General, ITAIPU Binacional Mr. Peter Traupmann, Managing Director, Austrian Energy Agency
16.30 - 18.00	<b>Parallel Session 4–Technology Transfer and Innovation – Rittersaal</b>
Moderator	Mr. Omar El Arini, Honorary Chief Officer, Multilateral Fund Secretariat
Panelists	Mr. Giovanni Federigo De Santi, Director of the Institute for Energy and Transport of the Joint Research Centre of the European Commission Mr. André Faaij, Head of Energy and Resources Unit and Scientific Director, Copernicus Institute of Sustainable Development, Utrecht University Mr. Martin Krause, Regional Practice Leader for Environment, UNDP Mr. Sidi Menad Si-Ahmed, Director of Montreal Protocol Branch, UNIDO M.R. Mr. Pongsvas Svasti, Associate Professor, Thammasat University Mr. Sven Teske, Director of Renewable Energy, Greenpeace International
18.00	Reception hosted by REEEP







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