

Introduction Course on Renewable Energy and Energy Efficiency for Policy Makers in Mexico

Mexico City, 21- 25 September 2015

Legend: Black font: Presentation Red font: Lecturer

	9:00 – 10:30	Coffee break	10:45 – 12:15	Lunch	13:15 – 14:45	Coffee break	15:00 – 16:30
Monday, 21.09	Introduction to workshop Interactive round of introduction and interrogation of delegates on their expectations 01 – Solar thermal <ul style="list-style-type: none"> • The solar resource for solar thermal • Solar water heating • Flat plate collectors, evacuated tubes, storage tanks • Solar-assisted central heating <i>Mario Alabí</i>		02 – Solar Thermal cooling & CSP <ul style="list-style-type: none"> • Solar cooling • System design and sizing • Short introduction to Concentrating Solar Power (CSP) <i>Mario Alabí</i>		03 - Hydropower <ul style="list-style-type: none"> • Principles of hydro-power • Types of hydro systems <i>Mario Alabí</i>		03 – Hydropower (continued) <ul style="list-style-type: none"> • Site assessment and sizing hydro systems • Small Hydro Power <i>Mario Alabí</i>
Tuesday, 22.09	04 – Energy Efficiency <ul style="list-style-type: none"> • Introduction to energy efficiency: • What energy efficiency is <i>Frank Schillig</i>		04 – Energy Efficiency <ul style="list-style-type: none"> • Energy management • Energy efficiency in industry – best practice and case studies <i>Frank Schillig</i>		05 - Photovoltaics <ul style="list-style-type: none"> • The solar resource for PV • PV modules • Grid-tied PV systems <i>Frank Schillig</i>		05 - Photovoltaics (continued) <ul style="list-style-type: none"> • Building Integrated PV (BIPV) • System design and sizing <i>Frank Schillig</i>

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Wednesday, 23.09	06 – Wind Energy <ul style="list-style-type: none"> The wind resource Wind speeds Wind energy principles <p>Frank Schillig</p>		06 – Wind Energy (continued) <ul style="list-style-type: none"> Types of wind turbines, large/small, grid-tied/stand-alone Limitations on harnessing wind energy in built-up environments <p>Frank Schillig</p>		07 - Bioenergy <ul style="list-style-type: none"> Types of bio-fuels (biomass, biogas, bio-liquid fuels) Wood fuels, wood chips and wood pellets for building heating Effective heat distribution in buildings Bioenergy and CHP <p>Frank Schillig</p>		07 - Bioenergy (continued) <ul style="list-style-type: none"> Biogas for electricity generation Biogas for the gas network Biofuels in transport Wider environmental issues <p>Frank Schillig</p>
Thursday, 24.09	08 – Overview of Renewable Energies 01 <ul style="list-style-type: none"> Background on Global Energy, Renewable Energies and Green-House-Gas emissions Motivations to Improve Renewable Energy Why do we need Renewable Energy Policies? Types of RE Policy Instruments and Success Factors Rationale of the Main Policy Instruments Characteristics of the Main Policy Instruments <p>Matthias Adolf</p>		09 – Overview of Renewable Energies 02 <ul style="list-style-type: none"> Feed-in Tariffs Quota-System Fiscal and Financial Incentives Net Metering Energy Service Companies <p>Matthias Adolf</p>		10 – Overview of Renewable Energy: Policy Concepts for Electricity Markets <ul style="list-style-type: none"> Electricity Market Structures – Private, State-Owned or Semi-Public, Price Development Unbundling of Utilities and Grid Operators towards Open Markets Consequences of Liberalization for “Natural Monopolies” of Grid Operators Duties and Competencies of a Regulatory Authority Electricity Trading <p>Matthias Adolf</p>		11 – Grid Integration, Smart Grids and Energy Storage <ul style="list-style-type: none"> Energy situation of EU Desertec – A solution? Electricity storage facilities Grid Integration and Smart-Grids Conclusions <p>Matthias Adolf</p>
Friday, 25.09	12 – Energy Efficiency: Industry <ul style="list-style-type: none"> Background Global Energy Efficiency Motivations to Improve Energy Efficiency Why do we need Energy Efficiency Policies? <p>Matthias Adolf</p>		12 – Energy Efficiency: Industry (continued) <ul style="list-style-type: none"> Preconditions for Using Different Instruments Success Factors of Different Policy Instruments Examples of Different Policy Instruments <p>Matthias Adolf</p>		13 - Energy Efficiency: Buildings <ul style="list-style-type: none"> Energy Efficiency Measures Key Policy Instruments How to Measure Energy Efficiency: Indicators Example of Financing Instruments based on Public Funding Preconditions for Using Different Instruments <p>Matthias Adolf</p>		14 - Final recap/communication tips session <ul style="list-style-type: none"> Recapping the most relevant lessons learnt Key information to take home and share Roleplay game. Development of an energy roadmap in Renewable Energy country. Different actors (policy, economy, NGO, etc.) <p>Matthias Adolf</p>