



GREEN ECONOMY GREEN GROWTH-MYANMAR(not-for-profit) ASSOCIATION

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THE PROGRAMME SECOND MYANMAR GREEN ECONOMY GREEN GROWTH: *MOVING FORWARD.*

ANNEX 3.2

Planning for Low-carbon Pathways: LEAP Long -range Energy Planning Systems: REAP

Facilitated by Stockholm Environment Institute, SEI

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Introduction

Developing strategies for low-carbon economic development requires both an in-depth understanding of the potential of various technologies in the myriad of energy-related uses and generation options, as well as knowledge about the role of energy choices in the broader economy; in other words, understanding the system both bottom-up and top-down. This workshop will introduce participants to two tools and approaches that allow planners to examine the impacts of different development pathways from these two complementary perspectives.

Participants will receive presentations, take part in activities to explore different tools for developing low carbon scenarios and contribute to discussion. Workshop materials will be provided including a programme/agenda, information summary sheets for each section, presentations slides and background information for the tools, with tool exercise sheets.

Detailed Agenda

| Time | Activity | Lead |
|-------------|--|--|
| 9.00-9.05 | Introduction and welcome | Ellie |
| 9.05-9.20 | <p>Introduction to work on low carbon pathways:</p> <ul style="list-style-type: none"> • Baseline, starting point • Methods and approaches to scenario development and target setting • Stakeholder engagement • Policy decisions, pathways | Ellie |
| 9.20-9.40 | <p>Data requirements for a low carbon pathway:</p> <ul style="list-style-type: none"> • Baseline data, indicators, existing information, assessment of energy supply and use, other sources of GHGs (e.g. agriculture). Supply and demand (consumption). • Overall scenario aims and setting targets (growth and efficiency, avoiding high-carbon growth, absolute targets etc.) • Technological interventions: costs, appropriateness, accessibility, scale of intervention (supply-side or demand-side) • Continued data collection, technologies for data collection, assessment of targets. | <p>Ellie/<i>Thai LEAP team</i></p> <p><i>Example of scenario aims and targets from another country? E.g. China/Thailand?</i></p> |
| 9.40-10.00 | <p>Bottom-up data collection - An introduction to LEAP</p> <ul style="list-style-type: none"> • How to build up an initial database • Energy demands, energy supply • Populating with data...? | <i>Thai LEAP team</i> |
| 10.00-10.40 | LEAP Activity | All (<i>Thai LEAP team to develop exercises</i>) |
| 10.40-10.50 | <p>Funding and political requirements for low carbon pathway</p> <ul style="list-style-type: none"> • Funding options • Legislation options • Both including examples from other areas | <i>Thai LEAP team</i> |
| 10.50-11.00 | COFFEE BREAK | |
| 11.00-11.35 | <p>Top-down assessment data requirements – An Introduction to consumption-based and supply chain accounting methods; linking national economic and environmental indicators</p> <ul style="list-style-type: none"> • Summary of concepts, territorial data collection and information required for consumption-based accounting (industry/sector level energy use) • Tools and techniques available, footprint family (REAP/EUREPA) • Options for consumption-based scenarios, industrial | <p>Ellie introduction</p> <p>All to look at tools and complete simple exercise in EUREPA</p> |

| | efficiencies | |
|--------------------|--|--|
| 11.35-11.45 | <p>Summary of accounting, reporting and engagement options at different scales:</p> <ul style="list-style-type: none"> • Individual (e.g. awareness raising, household technologies, REAP Petite/carbon allowances) • Local level/business unit (e.g. business monitoring and data provision) • Regional planning (e.g. LEAP) • National collecting and aggregating data (integrated economic and environmental indicators) | Ellie |
| 11.45-12.00 | <p>Summary of practical steps for data collection and tool development to help measure progress towards low carbon pathway:</p> <ul style="list-style-type: none"> • Suggestions, discussion and formulation of steps | <p>Ellie introduction</p> <p>All contribute to formulation of steps</p> |
| 12.00 | END | |

Background to LEAP:

Participants will first learn about the bottom-up method, LEAP (Long-range Energy Alternatives Planning System) (<http://www.energycommunity.org/>). LEAP is an integrated modelling tool that can be used to track energy consumption, production and resource extraction in all sectors of an economy. It can be used to account for both energy sector and non-energy sector greenhouse gas (GHG) emission sources and sinks. In addition to tracking GHGs, LEAP can also be used to analyse emissions of local and regional air pollutants, making it well-suited to studies of the climate co-benefits of local air pollution reduction. LEAP is also a key tool in the UNDP's efforts on capacity building for Low Emissions Development Strategies (<http://www.energycommunity.org/Documents/LECBPBrochure.pdf>).

Background to REAP:

Participants will also learn about the more top-down method, REAP (<http://www.resource-accounting.org.uk/reap>), which looks at more macro-economic impacts of different energy pathways. REAP provides scenario, modelling and policy assessment of Sustainable Consumption and Production. REAP uses some of the most sophisticated modelling approaches to understand the material flows, carbon dioxide emissions, and greenhouse gas emissions and ecological footprints at the national scale.