



MitigationMomentum

# NAMA for EE in Thai Industry

Defining the scope and focus

Pattaya TGP-EEDP workshop, November 22<sup>nd</sup> 2014

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# Introduction

## Project overview

- Ambition and timeline
- Expected output(s)
- Thai context and scope

## Analysis

- Selection criteria
- Three possible focus areas
- Findings

## Discussion

- Suggested focus
- Next steps

## Backup slides

## The aims of this presentation:

- *Briefly re-introduce the MitigationMomentum project*
- *Share preliminary findings on three opportunities for a supported NAMA on energy efficiency in Thai industry, and*
- *Present a structured discussion on the focus of the NAMA and next steps.*

## Project overview: ambition and timeline

**MitigationMomentum:** is a project running up to the end of 2015 which is funded by the German government to support the development of concrete NAMAs proposals in a range of partner countries, and foster cooperation and knowledge exchange within the international NAMA community.

### Project Ambition

- Finance-ready proposal for supported NAMA
- Identify ambitious yet feasible energy savings strategies for Thai industry
- Create awareness and buy-in among industry and government stakeholders
- Support finding possible international funders and domestic partners for the NAMA

### Project Timeline

- Preparation phase: May 2014 – November 2014
- Concept development: November 2014 – March 2015
- Proposal development: March 2015 – September 2015
- Support for securing funding: March 2015 – November 2015

## Project overview: Thai context and scope

### Energy efficiency promotion in Thailand

- EEDP: Perspective for policy makers: strategies and plans
- NAMAs: ONEP coordinates, but many organisations involved

### Scope of the NAMA

- EE and Industry
- Link to earlier workshop – and to current workshop
- Purpose of this presentation: to narrow down scope

### Partners and stakeholders

- ONEP, EPPO, and DEDE
- TGP-EEDP and other support programmes
- Industry / Finance / Energy representatives and experts



# Analysis: Selection criteria

Recall from previous EE NAMA working group:

## Effectiveness and ambition

- Mitigation potential
- Sustainable development (co) benefits
- Potential for transformational change



## Need for support

- Is government intervention necessary?
- Case for international support and phase out strategy
- Match with donor preferences



## Feasibility

- Likelihood of implementation before 2020
- Domestic contribution or co-sponsor
- EEDP potential for scaling up and replication

## Analysis: Three focus areas

### Policy focus: EERS supporting innovative technologies

- This concept would focus on what a design for an energy efficiency requirement scheme (EERS) for industrial energy use in Thailand could look like, including how international support could be used to incentivise innovative technologies.

### Sub-sector focus: Automotive industry

- This concept would examine how the measures proposed in the EEDP could be best applied and complemented to promote energy saving in a specific industry, in this case the automotive manufacturing sector.

### Actor focus: ESCOs in industry

- This concept focuses on making ESCOs more active and successful in the industrial sector, particularly for small and medium enterprises (SMEs).

# Analysis: Findings

## Policy focus: EERS supporting innovative technologies

- **High level of ambition** – assuming a savings target of 0.5-1% of final energy consumption annually
- **Feasibility** – Obligation systems in other countries generally have a limited focus on industrial energy consumption, and rarely address innovative saving options explicitly
- **Transformational**: ‘guarantees’ saving targets and shifts responsibility to utilities
- **Replication and scaling up**: potential to expand type of innovative technologies targeted, or diversify EERS to other sectors
- **Need for Support**: A key challenge will be in deciding how support is used within such a regulatory instrument
- **Suitability for supported NAMA**: building a robust EERS system shows ambition beyond what the market will do without intervention

# Analysis: Findings

## Sector focus: Automotive in Industry

- **Scope and concept:** can allow the specific challenges of a sub-sector to be explored and resolved
- **Feasibility:** Needs buy-in of key players and specific data can be considered commercially sensitive. Publicly available data on international best practices in this field is limited
- **Transformational:** could contribute to sustaining the competitiveness of the Thai auto industry
- **Existing efforts and synergies:** the NAMA would support existing efforts of the EU Switch Asia project in Thailand which targets greening of supply chains in the Thai Auto and Automotive Parts Industries
- **Suitability for supported NAMA:** domestic benefits for the Thai automotive sector, substantial mitigation potential and increasing focus on SMEs as drivers of growth over the past decade . Challenge to decide what specific measures may be required for the automotive sector outside of the EEDP or how EEDP measures can best be promoted for the automotive sector.



# Analysis: Findings

## Actor focus: ESCOs in Industry

- **Feasibility:** In various developing countries ESCOs are very active in the industrial sector
- **Transformational:** moves ESCOs towards a sustainable EPC business model funded by commercial lending
- **Replication and scaling up:** EPC ESCO model not apparent in Thailand. Could be scaled up and applied to other sectors
- **Need for support:** Thai governments mandate and philosophy in terms of the ESCO Fund may be characterized as understandably risk- and loss-averse. NAMA could explicitly address the challenge of providing a non-recoverable incentive (e.g. a guarantee) that could stimulate commercial lending
- **Suitability for supported NAMA:** Thai government has ambition to grow the ESCO market. ESCO fund has already attempted this. International support can look at stimulating commercial lending from private financial institutions
- **Existing policy and government efforts:** Complements the ESCO Fund administered by DEDE and its original vision. In particular complements phase 4 plans .

## Discussion: **Decision on scope and focus**

### **NAMA 1:**

Actor focus: ESCOs in Industry

OR

### **NAMA 2:**

Policy focus: EERS supporting innovative technologies



## Discussion: Next steps

### Finalise scoping note

- 10-page scoping note
- Deadline: November 2014

### Develop stakeholder engagement strategy

- Continue to coordinate with relevant stakeholders

### Analysis and NAMA concept development

- 10-20 page concept note
- Deadline: March 2015

### Timeline December 2014 – December 2015

- Phase 1 – concept development
- Phase 2 – NAMA proposal development
- Phase 3 – support for securing international funding



## Expected outputs

### Preparation phase (May 2014 – Nov 2014)

- 10 page scoping note
- Analysis of focus areas
- Work plan

### Concept development (Nov 2014 – Mar 2015)

- 10-20 page concept note
- Stakeholder engagement strategy
- Validation workshop

### Proposal development (Mar 2015 – Sep 2015)

- Synthesized NAMA proposal
- Validation workshop
- UNFCCC Registry submission
- Communication material different audiences
- Roadmap next steps

### Support for securing funding (Mar 2015 – Nov 2015)

- Briefing on Top-3 funding opportunities
- Support for application submission(s)



MitigationMomentum

**Thank you!**

**ขอบคุณ!**

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## Preparing for EERS in Thailand

Industry sub sectors	Technologies	Policies	Actors
Chemical	Lighting	Regulatory (EERS)	Government (DEDE/EPPO/...)
Metal	Motors	Voluntary	Industrial end users
Food and beverage	Electrical equipment	Economic (SOP/DSM bidding)	ESPs
Textile	...	Information	ESCOs
Pulp and paper	...	Public goods provision	Financial institutions
Utilities	...		Industrial associations
Non-metallic	Innovative technologies		

### Selection criteria NAMA scope

- Economic
- Environmental
- Social
  
- Feasibility
- Potential for transformational change
- Ambition
- Suitability for international support

### Concept:

In anticipation of an ambitious EERS system, various supporting policies and measures are needed to allow industry to contribute to the targets. The NAMA will build on EEDP proposed actions such as the link with DSM bidding and SOP, promoting ESCOs (e.g. facilitation and new financial instruments), and high quality evidence base (e.g. data). Focus will be on technologies that are expensive (i.e. not likely to happen with existing policies).

### Questions:

- Will EERS remain priority after current government reassessment?
- What are international experiences and good practices with EERS supporting policy frameworks?
- Which EE technologies in (Thais) industry are NOT low-hanging fruit and therefore interesting for the NAMA?

# Empowering Thai ESCOs for Industry

Industry sub sectors	Technologies	Policies	Actors
Chemical	Lighting	Regulatory (EERS)	Government (DEDE/EPPO/...)
Metal	Motors	Voluntary	Industrial end users
Food and beverage	Electrical equipment	Economic (SOP/DSM bidding)	ESPs
Textile	...	Information	ESCOs
Pulp and paper	...	Public goods provision	Financial institutions
Utilities	...		Industrial associations
Non-metallic	Innovative technologies		

## Selection criteria NAMA scope

- Economic
- Environmental
- Social
- Feasibility
- Potential for transformational change
- Ambition
- Suitability for international support

## Concept:

In anticipation of ambitious EE targets, ESCOs in Thailand could be more active in the industry sector in Thailand. Current ESCO successes appear to be mainly in the building sector, and despite support (ENCON/ESCO fund, etc.) initial research reveals that many information and financial barriers persist. Building on the Thai experiences with ESCOs and international good practices, the NAMA will support ('empower') the ESCO sector to work in industry.

## Questions:

- What are specific activities of ESCOs in Thailand so far, and what is the specific mandate of the ESCO fund?
- What are international experiences and good practices with ESCOs supporting industry (esp .SMEs)?
- How can facilitators be included in a NAMA, and what public finance mechanisms could be appropriate?

# Harnessing EE potential in Thai food and beverage Industry

Industry sub sectors	Technologies	Policies	Actors
Chemical	Lighting	Regulatory (EERS)	Government (DEDE/EPPO/...)
Metal	Motors	Voluntary	Industrial end users
Food and beverage	Electrical equipment	Economic (SOP/DSM bidding)	ESPs
Textile	...	Information	ESCOs
Pulp and paper	...	Public goods provision	Financial institutions
Utilities	...		Industrial associations
Non-metallic	Innovative technologies		

## Selection criteria NAMA scope

- Economic
- Environmental
- Social
  
- Feasibility
- Potential for transformational change
- Ambition
- Suitability for international support

## Concept:

In support of ambitious EE targets, the EEDP aims to further detail and expand the current policy framework. The NAMA will present sector specific 'supporting' actions to make the 'generic' policies and measures in the EEDP work for the *food and beverage* sector, thereby harnessing the potential in that sector.

## Questions:

- What sector data is available? Which government policies and strategies are leading?
- What is the market structure? and where are the (untapped) savings potentials?
- Where is 'room for improvement' of existing policy by addressing sector specific barriers and challenges?
- Who do we need to work with?

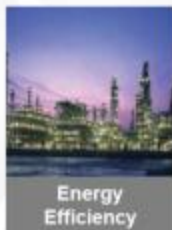


# Introduction

## ECN Policy Studies

Energy research Centre of the Netherlands since 1955

- Over 500 staff in seven research areas
- 60 staff in unit Policy Studies
- Main think tank for Dutch government on energy and climate.



## Global Sustainability group

Within ECN Policy Studies 15 staff work on issues of 'global sustainability' with a focus on four key themes:

Low-carbon development	Energy for development
Long-term scenarios	International CCS

**Clients include:** European Commission, UNFCCC, UNEP, UNDP, CDKN, DFID, GIZ, BMU, WB and the IPCC

**Experience working in:** Indonesia, Kenya, Ghana, South Africa, Argentina, Brazil, Mexico, Kuwait, etc.

# Introduction

## MitigationMomentum

*Encourage learning on NAMA development, and assist selected countries with developing a NAMA proposal ready for finance*



*We are proud to have Thailand participate in the second phase of the MitigationMomentum project*

## Project output and collaboration

- Four NAMA Status Reports
- Discussion papers on finance, MRV, and ODA
- Assistance on NAMA development
- Five country NAMA proposals



- Various case specific policy briefs
- Member ENC think tank; participation international dialogues and workshops