

Development of Baseline and Mitigation Strategy for the Thai Refrigeration and Air-Conditioning Sector

**Project Overview:
Partners, Implementation Plan, Current Status**

GIZ Proklima

Bangkok, 31st July 2012

Content

Background: GIZ Proklima – Where do we come from?

Barriers for NAMA Preparation

Project Objective, Partners, Implementation

Workplan & Current Status

Where do we come from?

- Montreal Protocol: Implementation of the German bilateral quota (20% of the German contributions to the Multilateral Fund)
- Policy Advice: Support governments of partner countries on drafting regulations and setting policies that comply with international environmental agreements
- Technology Transfer: Support of ozone layer & climate friendly technologies in RAC and Foam sectors
- Emission Reduction: Reducing the consumption of industrial gases with negative climate impact in RAC and Foam sectors
- Operationalizing cross-conventional strategies and realizing synergies with other multilateral environmental agreements (e.g. Basel, Kyoto, Rotterdam, Stockholm)

Where do we come from?

GIZ Proklima co-operates with a variety of private and public partners:

- United Nations organizations and World Bank;
- Governments in partner countries in Africa, Asia and Latin-America;
- Bilateral agencies (AFD, SDC, ...)
- Associations representing industrial sectors;
- Vocational training institutions;
- Individual companies in the production and service sectors.

GIZ Proklima

- 15 years global activities
- ~ 200 projects
- ~ 30 countries
- ~ 8000 ODP tons reduced
- ~ 40 Mio t CO₂-eq. reduced



Focus on

- natural refrigerants with low GWP and high energy efficiency
- Sustainable solutions for AC and refrigeration

International Climate Initiative (ICI):

ONE WORLD. ONE INTERNATIONAL CLIMATE INITIATIVE.

The International Climate Initiative (ICI) has been financing climate protection projects in developing and newly industrialising countries and in transition countries in Central and Eastern Europe since 2008. The International Climate Initiative receives funding from emissions trading and thus represents an innovative financing mechanism to support partner countries in the area of climate protection. With this new form of cooperation the Federal Environment Ministry supplements the existing development cooperation of the German government.



<http://www.bmu-klimaschutzinitiative.de/en/theme>

Cool and sustainable

Proklima projects within the International Climate Initiative



On behalf of

Content

Background: GIZ Proklima – Where do we come from?

Barriers for NAMA Preparation

Project Objective, Partners and Implementation

Workplan & Present Status

Barriers for NAMA preparation:

- Decision makers cannot estimate emission reduction potentials of climate friendly alternatives to HFCs
- Reliable data missing (no HCFC and HFC inventories available)
- Transparent information & know-how on alternative technologies still needs to be made available
- Institutional framework for NAMAs not yet fully established
- Appropriate MRV methodologies still to be developed

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Background: GIZ Proklima – Where do we come from?

Barriers for NAMA Preparation

Project Objective

Workplan & Present Status

Project Objective & Expected Outcome

- **Objective:** Establish tools and methodologies for NAMAs in refrigeration, air conditioning and foam sectors (incl. MRV)
- **Expected outcome:**
 - > Enable decision makers to identify and estimate emission reduction potentials of climate friendly alternatives
 - > Guidelines for sector specific NAMA preparation
 - > NAMAs ready to be submitted for funding;
- **Partner countries:** India, Mexico, Thailand
- **Duration:** Nov 2010 – Dec 2012
- **Beneficiaries:** Decision makers in Government & Industry

Implementation:

- Development of methodologies and instruments to inventorise HFC production & consumption and to identify potential emission reductions
- Data collection & - analysis / Building an HFC inventory
- Ranking of various options (taking under consideration technical feasibility & cost efficiency)
- Analysis of the existing regulatory framework and standards, outline of applicable policy instruments and incentive mechanisms

Benefits:

- Development of a methodology (so far not existent) and other instruments for NAMAs in the RAC & Foam sectors
- For the first time a comprehensive concept for HFC phase-out will be available in developing countries
- First comprehensive data inventory of HFC emissions
- The practical approach of the studies allows immediate planning and implementation of national strategies
- Transparent information on HFC-free technologies will be available to decision makers
- Multiplier effect and good chances for upscaling

Project Implementation Framework:

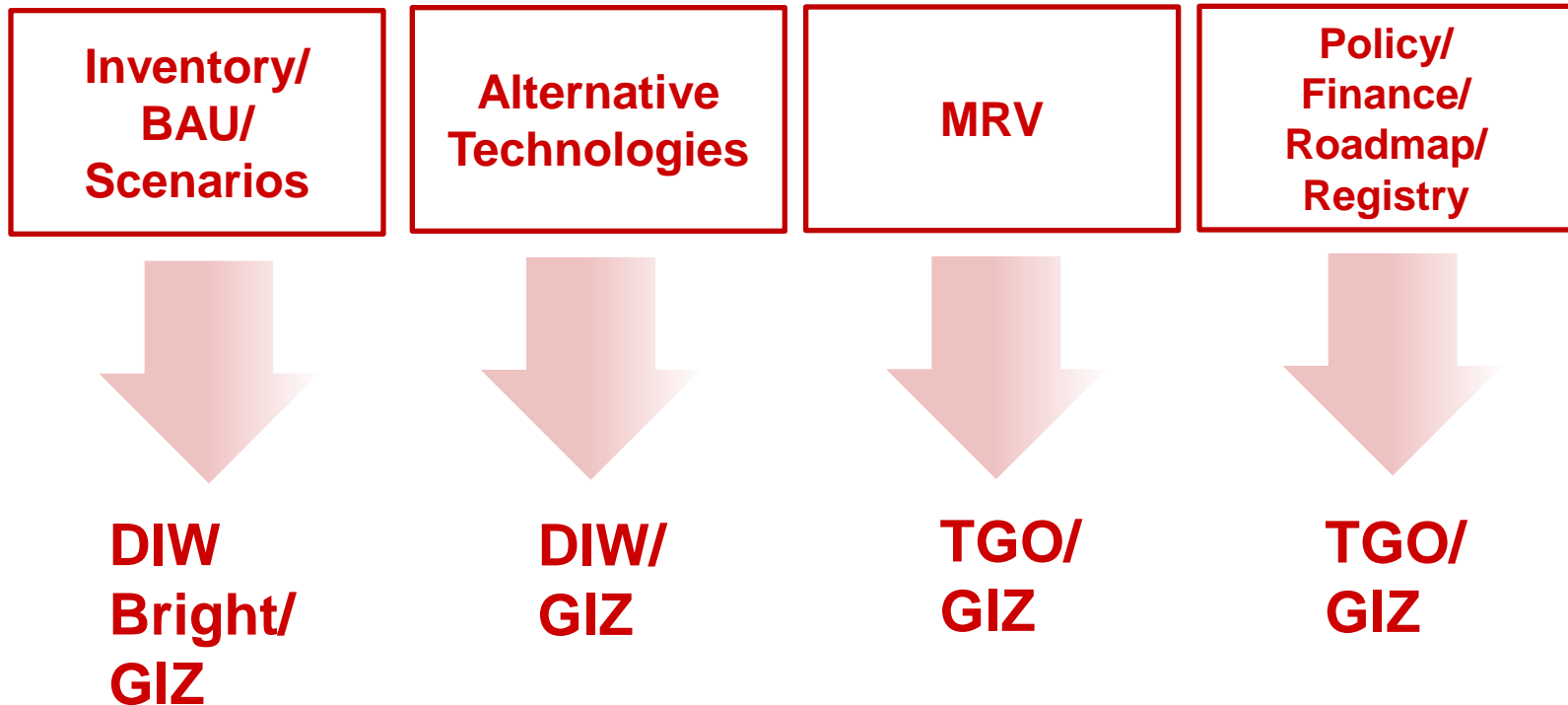
Part 1: HFC Study (Partner DIW)

- **Objective:** building HFC inventory for Thailand
- **Expected outcome:** Enable decision makers to identify and estimate emission reduction potentials of climate friendly alternatives

Part 2: NAMA Preparation (Partner TGO)

- **Objective:** formulation of mitigation measures in RAC/Foam sectors
- **Expected outcome:** Guidelines for sector specific NAMA preparation / NAMA proposal ready for registration

Project Implementation Framework:



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Barriers for NAMA Preparation

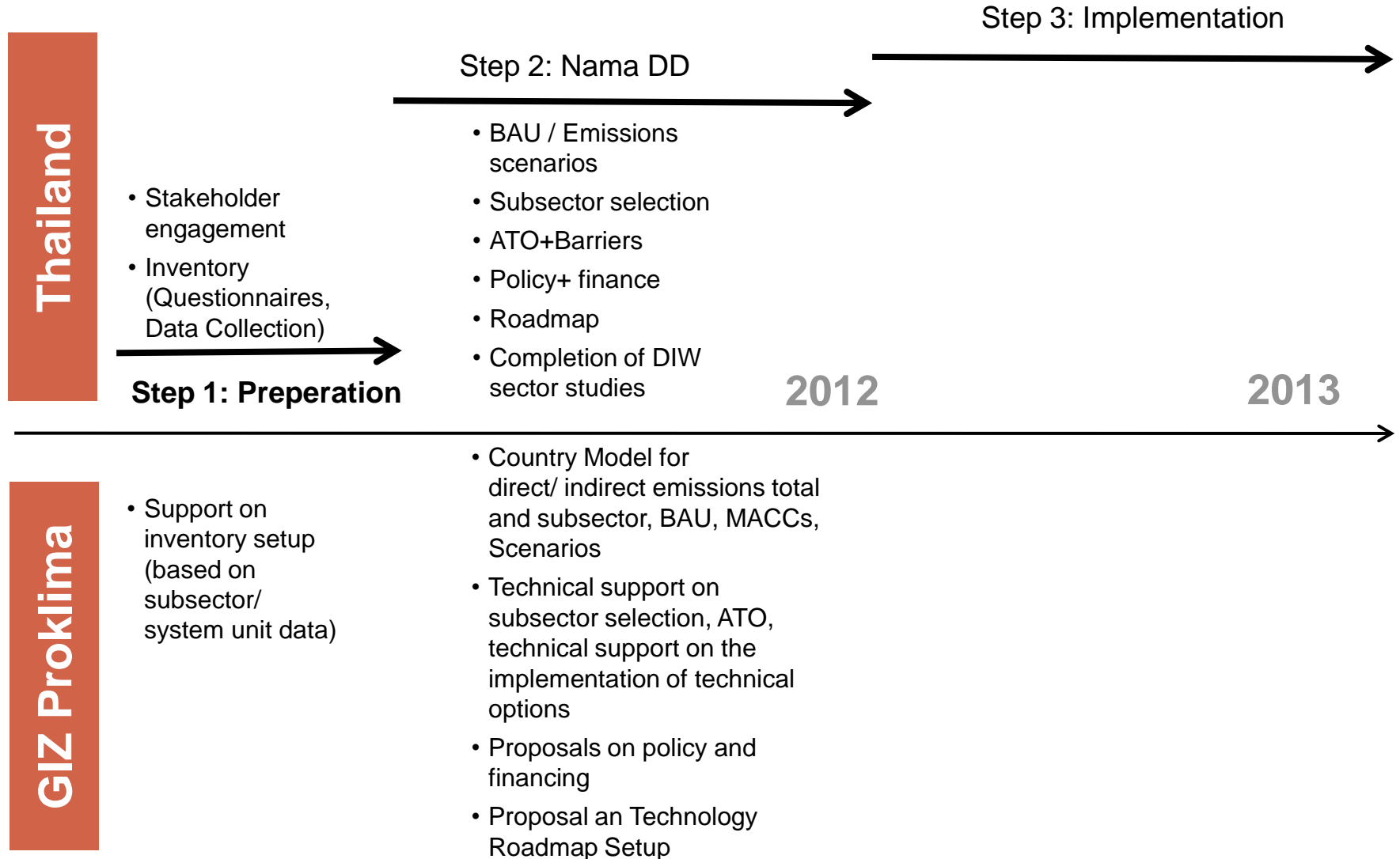
Project objective

Workplan

Workplan:

Part I: Inventory/ Stakeholder Engagement	Step 1	Stakeholder (Industry) Engagement	Institutional development and stakeholder engagement
	Step 2	Establishment of Inventory	
Part II: Preparing NAMA Description Document (NAMA-DD)	Step 3	Defining Sector BAU and Mitigation Scenarios	
	Step 4	Identification of Subsectors for Mitigation Action	
	Step 5	Alternative Technologies + Barrier Removal	
	Step 6	Policy and Financing	
	Step 7	Roadmap	
	Step 8	Upload NAMA – DD for Registration	
Part III: NAMA Implementation	Step 9	Enabling implementation of measures	
	Step 10	NAMA support framework	
	Step 11	NAMA Progress and verification of emission reductions	

Steps for NAMA development:



NAMA Building Blocks (key outputs):

<p>Nama Description</p>	<ul style="list-style-type: none"> ■ NAMA title; ■ Categorization/characteristics of the NAMA; ■ Objectives and general description of the NAMA; ■ Contribution to sustainable development of host country; ■ Detailed description of measures/project/ programme and the activities/measures to be implemented; ■ Location of the site/or geographical boundary of the activities; ■ Coordination/management responsibilities; ■ Implementation plan, structure and roles of key stakeholders.
<p>BAU/ Mitigation</p>	<ul style="list-style-type: none"> ■ BAU ■ Rational for measure to be implemented ■ Mitigation scenarios ■ Estimation of costs (Investment, R&D, Policy)
<p>MRV</p>	<ul style="list-style-type: none"> ■ Key monitoring parameters ■ MRV process (parameters, sources, frequency, data, responsibilities, methods, accuracy) ■ Evaluation framework for co-benefits
<p>Governance</p>	<ul style="list-style-type: none"> ■ Responsibilities
<p>Financing Proposal</p>	<ul style="list-style-type: none"> ■ Need and rationale for support ■ Potential sources for support ■ Financial proposal (cost/ benefits, origin of funds, financing instruments,

Thank you for your kind attention!