

METABUILD Regional Policy Dialogue Report

Prototyping Policy Solutions for Resource-Efficient Cleaner Production (RECP) in South Asia

New Delhi, 27 - 29 Nov 2019

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in Bangladesh, Nepal & Sri Lanka		
Challenge	Solution Prototype	
Missing monitoring schemes of RECP in SMEs	Promoting RECP energy audits amongst SMEs	
Lack of standardisation on RECP	Uniform standards for RECP in the SMEs	

Policy Solution Prototypes to boost RECP



No specific RECP policy in place

Lack of awareness for RECP amongst

industries, government bodies and the public

Insufficient motivation at SMEs to implement

The METABUILD Project

RECP measures

The METABUILD project is one of more than 120 grant projects implemented under the SWITCH-Asia programme in 24 Asian countries (2007 - 2020). The SWITCH-Asia programme was launched by the European Commission in 2007 with the goal to promote economic prosperity and to reduce poverty by encouraging sustainable growth with low а environmental impact amongst industries and consumers.

Building on the achievements of the preceding ACIDLOOP project, METABUILD has successfully replicated the approach across three geographies, namely Bangladesh, Nepal and Sri Lanka. As a multicountry, multi-partner project, METABUILD has supported over 400 metal product SMEs in building and construction sector to become more resource-efficient. Apart from direct industry support and awareness building amongst SMEs in the project countries, also achieved wider stakeholder METABUILD engagement through technology fairs, customer roundtables, policy exchanges, and the mobilisation of financial institutions.

RECP policy framework and incorporation of

its elements in sectoral policies

Making RECP assessments and

multimedia

polluting industries

RECP awareness campaigns through

implementations compulsory for SMEs

Introducing an RECP rating system for high

trainings, conferences, forums and

METABUILD Policy Dialogue Event

The METABUILD Policy Dialogue was held in New Delhi, India between 27 and 29 November 2019 and was part of the policy advocacy activities embedded in the METABUILD project.

At this event, policy experts and decision makers from Bangladesh, Nepal and Sri Lanka were invited to engage in discussions on how to optimise RECP policies together with a delegation of experts from India.

The aim was to derive prototypes for RECP policy solutions addressing prevalent challenges in the project countries. Before engaging in group-discussions, participants were briefed on the status quo of the RECP & SCP policy landscapes in each of the countries.

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For a more detailed analysis of the current RECP policy landscape in Bangladesh, Nepal and Sri Lanka, download the METABUILD RECP Country Policy Briefs here: <u>https://metabuildsouthasia.org/resource-centre/reports</u>

The briefings were followed by the presentation of best practices of policy conceptualisation and enforcement from India. Based on a collection and discussion of the prevalent challenges in each of the project countries, the plenum then voted on those challenges which they deemed particularly pressing and where they saw the potential for effective policy solutions.

Small groups of four to five people from each country formed to develop prototypes for policy solutions to tackle the selected challenges and to increase the overall effectivity and efficiency of RECP policies in the respective country context.

The Structure of this Report

The structure of this report follows the programme of the METABUILD Policy Dialogue.

First, some of the key challenges for RECP policymaking in South Asia will be described. A presentation of some best practices for RECP policies from India will be followed by a focus on the three project countries.

After a general description of the specific RECP policy situation in the respective country, the report will lay out the two prototypes that have been conceptualised in small groups for the specific country context during the Policy Dialogue.

Challenges in RECP Policy in South Asia

Economic upswing and increasing populations in South Asia have led to significant growth in the construction and manufacturing sector.

In South Asia, small and medium industries comprise a significant portion of the economy, especially in the manufacturing and construction sector. In Nepal, such industries constitute about 80% of industrial employment, 70% of the total national export, and around 25% of the country's GDP (UNCRD 2018). Likewise, in Sri Lanka, they are considered the backbone of the economy, contributing 52% of the GDP and 45% of employment (MIC 2018). In Bangladesh, small and growing industries account for 45% of value

addition in the manufacturing sector, 80% of industrial employment, and 75-80% of export earnings (Government of Bangladesh 2017).

Despite their prominent role for the economic development of their countries, many small and growing SMEs lack relevant financial and technical capacities, necessary to conceptualise, finance and implement measures to increase their resource efficiency.

These deficits lead to resource-inefficient production, especially in terms of water and energy usage. Beyond that, missing opportunities to cut production costs through increased resource efficiency also jeopardises industries' competitiveness in local and international markets. This dynamic makes small and medium industries a key target group for implementing RECP measures in the metal finishing sector.

Structural key challenges regarding RECP policy in Bangladesh, Nepal and Sri Lanka:

Lack of awareness for RECP amongst SMEs: SMEs are not aware of the importance of RECP and the business opportunities arising from it due to insufficient visibility of successful RECP measures and business cases.

Capacity constraints for RECP implementation within the sector: Key players in the manufacturing and construction sector lack technical support and experience in implementing measures to increase resource and energy efficiency.

Insufficient access to RECP finance: SMEs lack access to customised financial products, such as soft loans or other lines of credit to invest in RECP measures. Financial incentives like subsidies or tax deductions for RECP are either insufficient or not promoted effectively enough.

Lack of policy tools, strategies and implementation mechanisms: A holistic approach to RECP is often jeopardised by a lack of consistent frameworks, clear-cut standards policy for production processes and comprehensive monitoring and enforcing mechanisms.

Lack of awareness and coordination for RECP amongst government bodies: Government officials need more exposure to RECP to increase awareness for the urgency of this challenge and to ensure coordination between different ministries and government agencies for the promotion and consistent development of RECP.

RECP Best Practices from India

Numerous best practices for RECP policies from India were presented to kick-off the discussion around potential policy solutions. Examples of these best practices are:

Co-Certification for Sustainable Products

In 1991, the Bureau of Indian Standard, the governmental standards organisation of India, issued a certification under the label "Eco Mark". The idea was to increase public awareness for sustainable consumption by awarding and encouraging businesses who adhere to the cradle-to-grave concept in their production chain and to scale up sustainable production on a national level.

The Indian Ministry of Environment and Forests (MoEF) constituted a steering committee and a technical committee, responsible for identifying eligible businesses and for developing and adapting certification criteria. The Bureau of Indian Standards manages the interaction with manufacturers, including product labelling and collection of certification fees.

As one of the key features to ensure transparency and credibility, the conformity with the Eco Mark certification is monitored and approved by an independent thirdparty organisation. The certification process includes a verification of relevant IDO certifications, inspection and testing of product samples, as well as an assessment of the production sites. Furthermore, the origin and processing of raw materials is tracked and waste management practices are audited.

Currently, the Eco Mark Label mostly covers consumer goods from various domains, such as hygiene products, paper, plastics, paints, batteries, electronics, pesticides and leather.

Promotion of Clean Technology and Energy Efficiency

Also in 1991, in the course of the National Programme on Energy Conservation, the National Ministry of Micro, Small and Medium Enterprises (MSME) launched a programme specifically targeting small-scale industries.

A core objective of the programme was to create awareness amongst small and medium industry clusters, especially foundries and steel-roll mills, for the benefits of applying new technologies to increase resource efficiency in the production process. Bottlenecks and gaps for energy conservation and the adoption of sustainable production techniques were identified in order to derive recommendations and finally follow up on their implementation. With the help of independent RECP experts, educational field programmes where established for engineers and supervisors from respective industries, including on-site energy audits.

Alongside this programme, the National Productivity Council, a nodal agency under the World Bank, added a waste minimisation project with similar capacity development measures. Successful participants of both programmes were then selected as facilitators for further so-called Waste Minimisation Circles (WMCs). These capacity development formats themselves have also reached other industries beyond the metal sector and are currently in different stages of development. Independent consultants continuously monitor the progress of these WMCs.

Another facet, adding to the comprehensiveness of the resource and energy efficiency efforts by Indian policymakers, is the Ministry of Non-Conventional Energy Sources (MNEC), which is promoting alternative and renewable energy usage in Indian industries.

NREA – Mainstreaming RECP Policy Efforts Nationally

With the overall goal to reshape the approach to resource usage on a national level, the Indian government with the support from TERI is currently establishing a National Resource Efficiency Authority (NREA). The main task of this institution will be to orchestrate all the different government initiatives around RECP. Apart from a working group of technical and administrative experts under the direction of a deputy director, the NREA will consist of a member group composed of ministry and state government officials, 25 government agencies and industry experts.

The NREA will drive forward various measures to comprehensively foster RECP nationwide, including:

- Mainstreaming holistic RECP approaches across institutions
- Formulating clear resource efficiency targets
- Setting standards and guidelines
- Conceptualising comprehensive action plans to reach resource efficiency targets
- Establishing audit mechanisms and monitoring progress alongside specific RECP indicators
- Providing Capacity Building Trainings

Potential focal sectors of NREA will include construction, steel, aluminium, solar PV, automotive industry and chemicals.

Key Mechanisms for Institutional Engagement

Summarising, the core mechanisms presented as best practice cases from India included:

- Highlighting technology innovation and waste minimisation through lighthouse projects
- Establishing criteria for eco-labels based on corresponding databases
- Increasing visibility of RECP challenges and opportunities through seminars and public events
- Promoting sustainable procurement and retailing amongst industries, as well as the usage of clean energy
- Guidance for RECP financing

Solution Prototypes from Bangladesh

With continuously high GDP growth rates between six and eight percent, with an energy demand expected to triple until 2020 and as the most densely populated territorial state in the world, resource efficiency is of vital importance for Bangladesh's economic and social welfare in the upcoming years.

Apart from relevant ministries, such as the Ministry of Industries, the Ministry of Power, Energy & Mineral Resources and the Ministry of Commerce, it is especially the Sustainable and Renewable Energy Authority (SREDA), who is championing RECP within the country (SREDA 2015).

However, there are no direct policies to specifically promote cleaner production, resource efficiency or energy efficiency specifically targeting the metal industry.

Prototype 1: Promoting RECP energy audits amongst SMEs

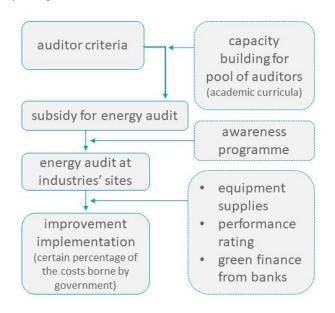
This prototype represents a concept for an incentive scheme for voluntary energy audits in the metal sector in Bangladesh. In the absence of formalised auditing schemes for energy and resource efficiency, the goal is to maximise industry participation in such audits and to incentivise measures for increasing energy efficiency.

Approach:

The approach foresees a capacity development programme for independent energy auditors enhanced

through financial subsidies to conduct energy audits on site with SMEs. In order to support participation in the audits, a governmental awareness campaign shall be designed targeting SMEs.

Financing entities would have to be mobilised to provide financing for implementing recommendations for increased energy efficiency, previously derived from the audits. A certain percentage of the costs will be borne by the government.



Government Contributions:

The government's contributions to facilitating the concept will include:

- Providing benchmarks of energy and resource consumption and insights on metal production processes to auditors and industries
- Building auditing capacities of independent auditors
- Providing information and approval for audit subsidies to industries
- Mobilising banks to co-finance energy efficiency measures and providing subsidies
- Validating improvements in energy efficiency and monitoring the audit process

Prototype 2: Uniform standards for RECP in the SMEs

This prototype gives a structural approach to the establishment of uniform standards for resource usage in the metal sector. The aim is to maximise productivity through increased resource efficiency.

Approach:

To implement the prototype, the Bangladesh Ministry of Industries (MoI) would set up an expert committee with the task to create concepts for RECP standards and to formulate ToRs for resource efficiency assessments. These drafts and conceptual documents would then be uploaded to an online platform with the possibility for industries, other government agencies, financial institutions and other stakeholders to suggest adjustments. The drafts would then be refined in a second loop by the Ministry and ultimately established in the form of binding standards for resource use in metal production processes. The approach foresees the MoI to monitor and revisit the standards on a yearly basis and make adjustments based on lessons learnt from implementation.



Government Contributions:

The role of the Mol will include several responsibilities:

- Selecting RECP experts for the policy drafting expert committee
- Facilitating access for stakeholders to assess and comment on the drafts for RECP standards
- Mobilising other government agencies, industries and financial institutions to engage in the consultation of policy drafts
- Coordinating feedback sessions and evaluating inputs given to refine production standards
- Continuously monitoring and refining production standards after their introduction as formalised policies



Solution Prototypes from Nepal

Although Nepal is still recovering from a devastating earthquake in 2015, the metal industry is on a steady rise as construction and especially reconstruction lead to a rising demand for metal products with many construction projects still lying ahead.

The Ministry of Industry, Commerce and Supplies, the Ministry of Forest and Environment and the Ministry of Labour together with the Nepalese Planning Commission (NPC) represent the most relevant actors in the field of RECP on a national level.

In 1997, the Nepalese government issued an Environmental Protection Act that requires industries depending on size and type of sector to undergo mandatory Initial Environment Examinations (IEE) and Environment Impact Assessments (EIA). In recent years, some policies have been introduced addressing electricity efficiency, such as the National Energy Efficiency Strategy. However, there exists no comprehensive policy framework around RECP (EU 2017).

Despite the efforts around resource efficiency, especially the discussions amongst international donors about green finance in Nepal mainly circle around the topic of access to (renewable) energy, as this remains an issue especially in rural and secluded regions of the country. Accordingly, the World Bank issued two grants with a total of \$7.6m especially to support off-grid renewable energy projects in Nepal (World Bank 2019).

Prototype 1: RECP policy framework and incorporation of its elements in sectoral policies

This prototype seeks to form a concept for a comprehensive RECP policy framework and to subsequently derive specific sectoral sub-policies.

Approach:

The approach to put up such a policy framework rests on three core pillars.

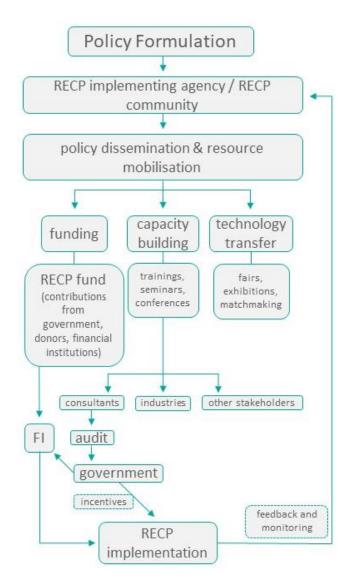
The first one is the creation of a joint fund with contributions from the government, SMEs and international donors. This fund will be the source for financial support for local SMEs to undertake energy and resource efficiency audits, bearing up to 80% of the associated costs. Furthermore, the fund shall serve as

a source for subsequent loans for implementing RECP measures.

The second pillar is a capacity development framework, where the government provides training and licensing for independent consultants to disseminate best practices and management tools for RECP implementation amongst Nepalese industries and also conduct industry audits.

The final component is a platform for technology transfer, where the government shall promote technology fairs and exhibitions and facilitate matchmaking between different industries for the exchange of best RECP practices within the metal sector.

Beyond that, the government would provide financial incentives such as tax benefits for RECP-enhancing equipment or measures to increase workers' health and safety.



Government Contributions:

Key governmental tasks in setting up this framework will be:

- Identifying key stakeholder groups, such as industries, consultants, financial institutions and donors and conducting needs assessments regarding RECP
- Hiring consultants to support the drafting of a policy framework
- Reviewing policy drafts and involving key focus groups
- Finalising policy documents and incorporating them in the legislative process to derive binding RECP policies
- Setting up and administering the fund
- Facilitating technology exchanges, awareness programmes and a capacity development programme for future RECP consultants and auditors

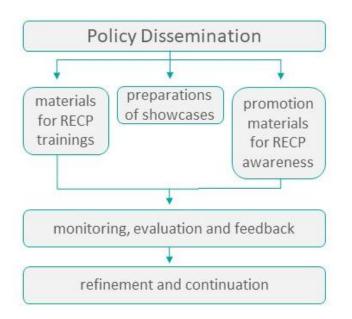
Prototype 2: RECP awareness campaigns through trainings, conferences, forums and multimedia

This prototype tackles the generally low awareness for RECP related matters amongst Nepalese industries, governmental institutions and the general public. The goal is to create a wide acceptance for the problems arising from scarcity of resources, as well as poor resource and waste management.

Approach:

The approach includes the conceptualisation of training materials to conduct RECP awareness trainings for industries and public stakeholders. Alongside these trainings, promotion materials shall be disseminated and showcases of successful RECP measures shall be championed in order to create a reference point for RECP management and to illustrate the environmental, economic and strategic benefits from improved RECP for SMEs.

Each of these prototype components - awareness campaign, trainings, showcases, will be reviewed, further adapted and enhanced based on stakeholder consultations and initial implementation experiences. The idea is to also involve academic institutions, practitioners and a range of government institutions to deliver inputs for the design and refinement of this awareness framework.



Government Contributions:

The government will guide the entire process of setting up this holistic scheme for awareness raising. The government's activities include:

- Creating and disseminating awareness materials
- Conceptualising and coordinating trainings
- Collecting feedback and refining materials and trainings
- Securing sufficient funding



Solution Prototypes from Sri Lanka

With a booming building and construction sector, Sri Lanka's economy shows high demand for metal products and depends significantly on a functioning and sustainable SMEs. With rising resource prices and the threat of environmental degradation, the country's SMEs are a promising target for the implementation of RECP measures.

Specifically addressing the issue of RECP, the Ministry of Environment jointly with the country's National Cleaner Production Centre (NCPC) developed a National Cleaner Production Policy and Strategy (NCPPS) in 2005 (MoE 2005). This policy marks a paradigm shift in mainstreaming Cleaner Production in Sri Lanka as it envisages the incorporation of clean production concepts and practices in all sectors. While the NCPPS serves as an umbrella policy on cleaner production, sectoral cleaner production policies and strategies were subsequently developed. Here, the main responsibility lies with the National Steering Committee on Cleaner Production Policy and Strategy. The committee is led by the Ministry of Environment and includes representatives of other ministries and government agencies. Until today, sectoral CP strategies exist for the health sector, the tourism sector, the fisheries sector and the agriculture sector.

In addition, Sri Lanka has issued a National Solid Waste Management Policy in 2008 that explicitly aims at maximising resource recovery and minimising waste disposal. This policy is currently being revised and will be supplemented by the "National Waste Management Policy" (MoE 2018). As of now, the responsibility for solid waste management lies mainly with local government agencies.

Moreover, the Ministry of Environment is currently drafting an overarching national policy for sustainable consumption and production (Government of Sri Lanka 2019).

Despite a growing body of policies around RECP, Sri Lanka is still facing some challenges. One of these challenges is prevailing inconsistencies within RECP policies from different government institutions. Another crucial challenge is a need to more rigorously enforce and monitor the policies in place.

Prototype 1: Making RECP assessments and implementations compulsory for SMEs

This prototype seeks to increase the effectiveness of the enforcement of RECP policies through mandatory RECP assessments for industries. This represents an important component for closing the gap between RECP policymaking and impactful RECP measures on the ground.

Approach:

To establish a scheme for such RECP assessments, the Department of External Resources (ERD), together with the Ministry of Environment (MoE) would first convey key partners to support the initiative. Such partners should ideally include other ministries, such as the Ministry of Energy and the Ministry of Industry and Commerce, as well as government agencies, especially the Sustainable Development Council (SDC), the NCPC, the Central Environmental Authority (CEA) and the Sri Lanka Sustainable Energy Authority (SLSEA). Subsequently, local authorities across different provinces shall collaborate to implement RECP assessments.

The assessments will result in recommendations for the industries on how to decrease their carbon and material footprint. To incentivize industries to implement these recommendations, the idea is to make RECP investments tax deductible for industries, to install concessionary interest rates for RECP loans and to certify industries for increased RECP standards.

To jumpstart the initiative, a background paper with a detailed problem analysis and suggestions for the design and implementation of the scheme shall be presented to the cabinet for approval.



Government Contributions:

The MoE shall establish a steering committee and a project management unit to prepare, implement and monitor the assessment framework. Its task will include:

- Drafting policy acts and regulations to render RECP assessments compulsory for industries
- Sourcing funding for the implementation of the scheme and negotiating with different actors such as the national Board of Investment (BOI)

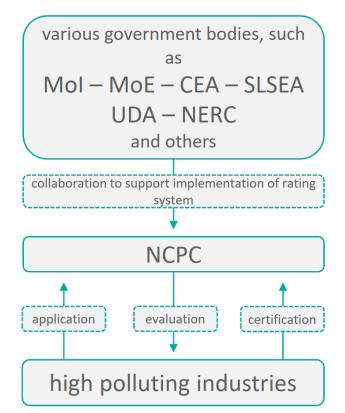
- Establishing training formats for consultants to become licensed RECP auditors
- Promoting the scheme and creating awareness for the new monitoring obligations
- Setting up a thorough reporting scheme to monitor the progress in resource and energy efficiency

Prototype 2: Introducing an RECP rating system for high polluting industries

This prototype also addresses the challenge of industries lacking the motivation to engage in RECP. In order to encourage them to adopt the latest innovative practices in their production processes, the idea is to introduce an RECP rating system for SMEs.

Approach:

The NCPC would be the main actor to bring this rating system underway. Further key partners would be the SLSEA and the Urban Development Authority (UDA).



The NCPC would create promotion materials to target high polluting industries and create awareness for the rating system. Industries would then submit applications based on self-assessments. After a sectoral RECP benchmarking by the NCPC, the agency would provide technical support and consulting for industries to adhere to existing RECP industry standards. After this phase of support, a third external party would then rate the industries. Through subsequent support from the NCPC, the industries will be enabled to continuously improve on RECP in their production processes and to obtain higher ratings in future assessments.

Government Contributions:

As mentioned before, the NCPC will take a major role in facilitating the rating system. This entails:

- Creating awareness for the rating system
- Initiating and steering the application process and rating incoming applications
- Coordinating activities with government bodies, industries and other stakeholders
- Providing one-on-one technical consultancy on RECP based on initial ratings of industries
- Certifying and showcasing industries with outstanding RECP performance
- Endorsing tailor-made bank loans to incentivise industries to improve their level of RECP

Summary

The prototypes developed during the METABUILD Policy Dialogue tackle significant challenges in the realm of RECP policymaking in the project countries Bangladesh, Nepal and Sri Lanka. Moreover, they shine a light on the areas where RECP policymaking should generally draw on. These areas are (1) creating awareness for the issue amongst industries, but also amongst government bodies, (2) securing a thorough implementation and enforcement of already existing policies and standards and (3) providing both, incentives and advisory to help industries overcome the barriers towards increased resource and energy efficiency.

The prototyped policy solutions presented in this report are not exclusively relevant for the METABUILD project countries. On the contrary, these solutions could help to foster RECP across South Asia in general and go beyond the present geographical as well as sectoral context of METABUILD.

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