



POLICY BRIEF

Promoting resource efficient cleaner production (RECP) in metal SMEs in the building and construction sector in Sri Lanka

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Background

Sri Lanka's **building and construction sector** is booming. The sector consumes large amounts of metals such as steel, iron, aluminium and copper, and is therefore highly dependent on the metal industry. The metal industry in Sri Lanka faces increasing pressure on energy, material and water resources as they are becoming scarcer and thus more expensive. One of the key challenges that the industry faces are high costs of production due to increasing prices of the above resources. This often results in a lack of competitiveness in the regional and international market.

In order to overcome this challenge, the **METABUILD project** promotes the adoption of Resource Efficient Cleaner Production measures in small and medium-sized enterprises (SMEs) operating in Sri Lanka's building and construction sector.

SMEs play a crucial role in Sri Lanka's economic development: More than 75% of all businesses in Sri Lanka are SMEs, accounting for 52% of the country's gross domestic product (GDP) in 2017. Moreover, more than one third of Sri Lanka's working population is employed in the SME sector, including skilled, semi-skilled and unskilled workers.

Metal SMEs in the building and construction sector include steel rerolling mills, ferrous and non-ferrous foundries as well as producers of black smithy and light engineering products such as bars, roofing materials, gates, doors, grills, frames etc.

Due to their small size and their limited capacity and resources, SMEs often have low environmental, health and safety standards. In combination with the polluting nature of production processes in the metal sector, this makes metal SMEs a promising target for the implementation of Resource Efficient Cleaner Production (RECP) measures.

RECP is an approach for business entities to increase their productivity and to contribute to social, environmental and economic sustainability. It combines two concepts:

- » **Resource Efficiency (RE)** means "reducing the total environmental impact of the production and consumption of goods and services, from raw material extraction to final use and disposal" (UNEP n.d.).
- » **Cleaner Production (CP)** is a "continuous application of an integrated environmental strategy to processes, products and services to increase efficiency and reduce risks to humans and the environment" (UNEP n.d.).

The **benefits** of adopting RECP measures are improved environmental and social performance while simultaneously increasing productivity and profitability. This includes reduced emissions and waste generation as well as safer and healthier working conditions. By taking up RECP measures, SMEs are enabled to cope with limitations in existing infrastructure (e.g. power and water supply) and to use scarce resources more efficiently. This will increase their national, regional and global competitiveness and also help them gain new customers who are looking for sustainable products and services.

Sri Lanka's government has largely recognised these benefits of "greening" the country's industry and launched many initiatives and schemes for promoting RECP.

In this policy brief, the METABUILD team therefore sketches the current status of Sri Lanka's RECP policy and regulation, presents a problem analysis and provides recommendations for strengthening RECP among metal SMEs in Sri Lanka's building and construction sector. The policy brief is based on desk research and inputs from Sri Lanka's National Cleaner Production Centre (NCPC).

Current Status of RECP Regulation

Environmental policy ranks very high on Sri Lanka's political agenda, with the country's President also leading the Ministry which handles the subject of environment i.e. the **Ministry of Mahaweli Development and Environment (MMDE)**.

The notion of environmental protection has a long history in Sri Lanka. A stone inscription set up by King Devanampiyathissa in 236 BC which refers to the protection of flora and fauna and certain areas of the land as sanctuaries can be found on Mihinthale Mountain that situates in Anuradhapura, then the capital of the country. It is considered to be the first written environmental policy in the world.

In modern times, the first **national environmental act** (NEA No 47) was issued in 1980. It was amended twice in 1988 (No. 56 of 1988) and 2000 (No. 53 of 2000) and instituted standards to control noise, waste water and air pollution generated by industries. In June 2019, the National Environmental (Stationary Sources Emission Control) Regulation, No. 01 of 2019 has been cited.

While the Ministry of Environment is executing the environmental policy in the country, the **Central Environmental Authority (CEA)** has been set up under the National Environmental Act No. 47 (1980) as a fully empowered agency to develop and implement legislations related to pollution prevention.

In this role, the CEA issues two type of licenses called Environment Protection Licences and Scheduled Waste Management Licences, both targeting environmental pollution control generated through industries. The Scheduled waste management licences include regulations on hazardous wastes (called "scheduled wastes" in Sri Lanka), particularly regarding the storage, transportation, handling, usage and disposal of hazardous wastes by industrial organisations.

Representing another central pillar of the policy framework of Sri Lanka is the **Sustainable Development Act**, enforced in 2017 as a holistic legal framework to ensure that the National Policy and Strategy on Sustainable Development is prepared in accordance with the provisions of the Act and comprehensively implement the National Policy and Strategy on Sustainable Development on a national level. Under this framework, the **Sustainable Development Council** has been put into place with the task to facilitate the achievement of national, regional and international commitments relating to Sustainable Development and monitor and synchronise all sustainability related policies of the different ministries and government agencies. 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 [4]. This policy marks a paradigm shift in mainstreaming Cleaner Production (CP) in Sri Lanka as it envisages the incorporation of CP 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. This strengthened the sector-wise implementation of CP concepts. 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 also includes representatives of other ministries and government agencies. Apart from implementation activities, the committee is also in charge of extending CP policies to other sectors. Until today, such sectoral CP strategies have been developed for the health sector (2007), the tourism sector (2008), the fisheries sector (2008) and the agriculture sector (2012).

In addition to CP policies, Sri Lanka has issued a **National Solid Waste Management Policy** (2008) that explicitly aimed at maximising resource recovery and minimising waste disposal. This policy is currently being revised and will be supplemented by the "**National Waste Management Policy**" [5]. As of now, the responsibility for solid waste management lies mainly with local government agencies, often supported by central government agencies through funding and capacity development. A five-year Action Plan initiated by the Western Province Waste Management Authority set the goal to increase the recycling rate up to 38% by 2020 from 17% in 2015. Under the National Waste Management Policy, the MMDE has decided to include a national policy on Chemical Management Policy in order to improve the chemical waste management at

the industrial level.

In 2009, the Sri Lankan government launched the **Haritha Lanka Programme**, a 7-year national action plan targeting ten key areas for greening the country. Under this programme the **promotion of a more sustainable building and construction sector** gained new momentum, e.g. through the "**Green Rating System**" for sustainable buildings [1]. The objective of this voluntary scheme was to increase efficiency of energy, water and materials used in the construction sector. The measures promoted under the scheme are in line with the RECP approach; they include heat control, use of natural light and breeze, rain water harvesting etc. – both for existing and new buildings. Another initiative put forward under the Haritha Lanka Programme is the establishment of the **National Council for Sustainable Development (NCSDD)**, chaired by the president himself and facilitated by the Ministry for Environment. The council functions as a platform to strengthen policy integration and implementation of the Haritha Lanka programme. After the conclusion of the seven years period of the Haritha Lanka programme, a follow-up action plan had not yet been published at the time of this report.

The **project on Sustainable Consumption and Production (SCP) policy support component**, supported by the EU-SWITCH Asia programme, is another milestone in this arena. The project was implemented under the MMDE between 2015 and 2018. The project's overall objective was to develop an overarching **national SCP policy for Sri Lanka**, which was drafted under the Ministry's leadership and got approved by the parliament in November this year. Before developing the new SCP policy draft, a total of 46 existing SCP-related policies were reviewed. During this review process, the gaps and inconsistencies of the existing policies were identified. These findings had been communicated to the relevant policy developers for their consideration.

In 2016 RECP was further promoted through the initiation of the **National Programme on Energy Demand Management, Efficient Energy Use and Energy Conservation**. Until 2021 a presidential taskforce will be drafting various recommendations for decreasing electricity consumption by over 20%.

In June 2018, the National Agency for Public Private Partnerships together with the Ministry of Finance in its **Environmental Assessment and Management Framework [2]** for Public Private Partnerships (PPP) published a guideline (Annex 8 of the framework) on mitigating negative impacts of construction projects, including specific notes on the sourcing of construction materials, transport and storage of soil, as well as water and noise pollution and construction waste management. In early 2019, the NCPC together with the MMDE started the planning phase to implement a four-year project on **“Global Best Practices on Emerging Chemical Policy issues of Concern under Strategic Approach to International Chemicals Management (SAICM)” [6]**, which will be implemented by NCPCs in eight different countries. The project’s overall goal is to improve the management of hazardous chemicals throughout their life cycle to minimize negative environmental and health impacts. Nationally, the project will support the MMDE by **piloting the recently designed Green Public Procurement Policy in the Construction sector**. One of the key implementing partners of this project will be the **Green Building Council of Sri Lanka (GBCSL)** that will incorporate the policy into its Green Building Certification Scheme.

This list of RECP policy instruments and initiatives shows that the Sri Lankan government is highly ambitious with respect to greening the national economy. However, while there are various national and sectoral approaches addressing RECP issues, there is no explicit initiative targeting metal SMEs

operating in the building and construction sector.

Problem Analysis

Sri Lanka’s economy, including its SME sector, is still in the process of recovering from the unrests of 30 years (1979-2009) of civil war. The Sri Lankan government, however, has shown high ambitions towards “greening” the process of economic recovery in order to achieve sustainable economic growth. This is a clear signal that the introduction of RECP measures at industry level is welcome. In practice, however, challenges regarding the implementation of RECP in metal SMEs remain, including policy and legislative obstacles, SMEs’ capacity constraints, SMEs’ difficulties in accessing green finance and general awareness issues.

Policy issues

One of the main challenges at policy level is **implementation**. In 1980, the CEA was established to provide for an institutionalised mechanism for enforcement of environmental regulations. Nonetheless, implementation of environmental policies has been inconsistent due to the civil war and related economic and political instability. Limited financial resources in government and administrative institutions, unfavourable fiscal policy decisions and a lack of political will are other barriers to effective policy implementation.

Although there are many initiatives and schemes for promoting cleaner production and energy efficiency in the building and construction sector, metal SMEs have not yet been identified as an explicit and promising target group. Hence, there is a need for specific support schemes for metal SMEs in Sri Lanka’s building and construction sector, which should take into account the technical and financial capacity constraints of SMEs.

In its **Voluntary National Review on the Status of Implementing Sustainable Development Goals in 2018** [3], the Sri Lankan government already acknowledged the issue that national RECP policies tend to come in the form of suasive initiatives instead of mandatory regulations. This poses the risk of slow policy adoption and reduced positive impacts due to the dependence on stakeholders' RECP awareness and their technical and organisational capability.

SMEs' technical capacity constraints

Small and medium-sized enterprises do not only differ from large enterprises in their number of employees and their financial turnover, but also regarding their expertise and their technical capacity. Firstly, SMEs often lack the management skills and knowledge to integrate sustainability approaches like RECP in their daily business. Secondly, the sector lacks awareness of available technical solutions and their potential benefits. Thirdly, SMEs often lack the technical capacities to procure, install and operate new technologies. These technical constraints are typically partnered with a high level of uncertainty about how RECP technologies might work in their respective settings. Thus, the overall challenge regarding SMEs' technical capacity constraints is the limited availability of skilled workforce, both at the managerial and at the operational level, that could provide knowledge on the introduction of RECP technologies and on the operation of respective technical facilities.

Access to green finance

Besides technical capacity constraints, SMEs also face limited access to green finance, which represents a major obstacle for RECP uptake. This is due to barriers on the SME as well as on the banking side [7].

SMEs, on the one hand, generally have difficulties in accessing external finance from lending institutions due to high interest rates

and required collaterals. Also, SMEs' management staff often has insufficient knowledge and skills to access potentially available external finance for RECP investments; they are, for instance, unaware of how to submit bankable investment proposals.

Financial institutions, on the other hand, are often reluctant to lend to SMEs in general and to green businesses in particular. Reasons for this reluctance include the banks' ignorance of SMEs' financing needs as well as the presumably higher risks related to small-scale green investments. Therefore, there are hardly any financial products available that explicitly target SMEs' small-scale RECP investments. Instead, most financial products offered by banks target investments at a larger scale and are therefore unsuitable for SMEs.

An exception to this general lack of awareness of SMEs' financing needs is **DFCC Banks'** lending policy. The bank has been providing financial support to Sri Lanka's SME sector for more than 50 years, focussing on energy efficiency and renewable energy projects. So far, however, green financing does not contribute significantly to greening Sri Lanka's SME sector.

Awareness and motivation issues

Limited awareness for the necessity of greening the industry in general, and the metal SMEs in particular remains a challenge at all levels. While cleaner production is becoming an increasingly prominent issue in Sri Lanka's political sphere, there is a tendency among the industry and consumers to neglect the topic at the micro-level.

In terms of policies, various actions to promote awareness for RECP have been taken over the past twelve years. In 2007, the National Cleaner Production Centre launched the **National Cleaner Production Awards Programme** as the first environmental awards programme in Sri Lanka, which covers the SME sector as a special category to promote and recognise

those enterprises that are implementing RECP measures. Similarly, the CEA launched the Presidential Awards for Environment – also called National Green Awards – that cover a wide spectrum of industrial and service organisations.

In January 2016, Sri Lanka’s President formally launched the awareness campaign “**Sri Lanka NEXT: A Blue – Green Era**”. One of the main objectives of this campaign is to promote more environmentally friendly industrial production and to contribute to raising awareness for RECP in the building and construction sector and in metal SMEs in particular. However, many SMEs still lack information about RECP issues. This remains a significant barrier for RECP promotion among Sri Lanka’s SME sector.

Recommendations

After analysing the above issues, the METABUILD team suggests to national policymakers to take up the following points to promote RECP in metal SMEs in Sri Lanka’s building and construction sector:

- » Promoting the building and construction sector as a priority area for upcoming RECP activities and policies;
- » Highlight the need for tailor-made policy formulation and implementation;
- » Re-tailoring existing RECP initiatives to particularly address SMEs;
- » Raising awareness for SMEs’ financial needs among financing institutions;
- » Aligning green investment programmes with SMEs’ financing needs;
- » Increasing public funding for RECP initiatives targeting SMEs;
- » Raising societal awareness for RECP through dissemination and education campaigns.

The METABUILD project seeks to promote actions in these areas and is willing to support any initiative addressing the above-mentioned issues.

References

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