

POLICY ANALYSIS PAPER

Draft Technical Document of EU-SWITCH-Asia Assignment

Acknowledgement

This [Policy Analysis Paper](#) is part of the technical support provided to the Ministry of Railways, Government of India through the SWITCH-Asia SCP Facility, which is funded by the European Commission.

Background of the SWITCH-Asia SCP Facility

The European Union launched the SWITCH-Asia programme with a mission to support the transition of Asian countries to low-carbon, resource-efficient and circular economies while promoting sustainable consumption and production patterns within Asia and greener supply chains between Asia and Europe. The programme aims at providing a platform to promote sustainable consumption and production (SCP) policies and practices in Asia and enhance the awareness and dialogue of local stakeholders. The SWITCH-Asia SCP Facility aims at strengthening the implementation of SCP policies at the national level.

Objectives of the assignment in India

In continuation of the efforts in India, the Ministry of Railways, Government of India, requested technical assistance for translating policies into a plan of action for mainstreaming Sustainable Public Procurement (SPP), sustainable building and construction, water and waste management, in the Indian Railways system. In response to this request, a team of Senior Experts, Dr. Prasad Modak and Mr. Walter Kahlenborn, was set up in April 2020 to carry out a number of activities, including a scoping report, training of staff at Indian Railways and an Action Plan with an implementation guide focusing on SPP.

Aim of this publication

This Policy Analysis Paper aims to formulate recommendations to the Indian Railways System on integrating SPP considerations into its procurement procedures.

Authors: Dr. Prasad Modak, Walter Kahlenborn

Supervision and Coordination: Arab Hoballah and Cosima Stahr

Funded by:

The European Commission; The SWITCH-Asia Programme

© 2021 SWITCH-Asia

Disclaimer: The information and contents in this Study are the sole responsibility of the authors and do not necessarily reflect the views of the European Union.

LIST OF ABBREVIATIONS

BHEL	Bharat Heavy Electricals Limited
CBG	Compressed Biogas
CFL	Compact Fluorescent Lamps
CII	Confederation of Indian Industries
CII-IGBC	CII- Indian Green Building Council
CPCB	Central Pollution Control Board
CPSE	Central Public Sector Enterprise
CRIS	Center for Railways Information System
EOI	Expression of Interest (EOI)
EPR	Extended Producer Responsibility
ESG	Environment, Social, Governance
EU	European Union
EU-REI	EU-Resource Efficiency Initiative
GEN	Global Ecolabelling Network
GeM	Government e-Marketplace
GFR	General Financial Rules
GHG	Greenhouse Gas
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
GoI	Government of India
GPP	Green Public Procurement
HSE	health, safety and environment
IGES	Institute for Global Environmental Strategies
IR	Indian Railways
IROAF	Indian Railways Organization for Alternate Fuel
LCA	Life Cycle Assessment
LCC	Life Cycle Costing
LED	light-emitting diode
MMTPA	metric tonnes per annum
MoEF	Ministry of Environment, Forests
MoF	Ministry of Finance
MSEs	Micro and Small Enterprises
MW	Megawatt
NITI	National Institution for Transforming India
NR	Northern Railways
NTPC	Thermal Power Corporation
ONGC	Oil and Natural Gas Commission
PM	Particulate Matter
PAGE	Partnership for Action on Green Economy
PSU	Public Sector Undertaking
REMCL	Railway Energy Management Company Limited
RSP	Responsible Sourcing Policy
SCP	Sustainable Consumption and Production
SATAT	Sustainable Alternative Towards Affordable Transportation

SPP	Sustainable Public Procurement
TMTCO2e	thousand metric tonnes carbon-dioxide equivalent
TERI	The Energy and Resources Institute
UCO	Used Cooking Oil
UNEP	United Nations Environment Programme
VOC	Volatile Organic Compound
WCR	West Central Railway
10YFP	10 Year Framework of Programmes on Sustainable Consumption and Production Patterns, now called <i>One Planet Network</i>

LIST OF TABLES

Table 1: Highlights of SPP initiatives in India's public sector	8
Table 2: Highlights of SP policies in India's private sector.....	11
Table 3: PAGE - Partnership for Action on Green Economy	16
Table 4: India SCP Multi-Stakeholder Consultation	17
Table 5: Technical Assistance to the Indian Resource Efficiency Initiative	18

TABLE OF CONTENTS

LIST OF ABBREVIATIONS	3
LIST OF TABLES	5
1. INTRODUCTION	7
1.1. Purpose and scope	7
1.2. Structure of the report	7
2. SUSTAINABLE PUBLIC PROCUREMENT IN INDIA	7
2.1. SPP Initiatives in India's Public Sector	8
2.2. SPP Initiatives in India's Private Sector	11
2.3. Enabling Initiatives	13
2.4. Gaps and Challenges	15
3. INTERNATIONAL SUPPORT TO SPP DEVELOPMENT IN INDIA	16
3.1. United Nations Environment Programme (UNEP) Initiatives	16
3.2. SWITCH-ASIA Initiatives	17
3.3. Other Initiatives	18
4. RECOMMENDATIONS	19

1. INTRODUCTION

1.1. Purpose and scope

Indian Railways (IR) is keen to introduce Sustainable Public Procurement (SPP) in their operations. Formulation of a Policy for SPP plays an important role in guiding an action plan for implementation. The earlier Scoping Study provides an overview of the general policy framework on public procurement covering General Financial Rules (GFR). The study also describes actions taken such as setting of the Task force on SPP at the Ministry of Finance (MoF).

This report presents an overview of SPP initiatives and experiences in India covering public and private sector and multinational organizations. The report is intended to provide input in the preparation of an action plan for SPP at IR.

1.2. Structure of the report

The report consists of four chapters. Chapter 1 presents purpose and scope. An overview of SPP related initiatives in public and private sector is provided in chapter 2. Enabling initiatives as well as gaps and challenges are also presented. Chapter 3 describes various support initiatives on SPP in India by international bodies. Chapter 4 provides recommendations.

2. SUSTAINABLE PUBLIC PROCUREMENT IN INDIA

Various initiatives and research reports have been released on SPP in collaboration with the Government of India. They include Sustainable Public Procurement: towards a low-carbon economy by TERI (2008)¹, a committee to formulate guidelines on Green Public Procurement (GPP)², a report on Green Public Procurement (GPP) Guidelines in India by the Confederation of Indian Industry (2012)³, Guidelines on Corporate Social Responsibility and Sustainability urge the Central Public Sector Enterprises (CPSEs) to initiate and implement measures towards a GPP supply chain (2013), the Department of Expenditure under Ministry of Finance established a Task Force on SPP (2018)⁴, NITI Aayog jointly with the European Union's Resource Efficiency Initiative (EU-REI) brought out a Status Paper on Resource Efficiency: Way Forward towards Circular Economy" (2019)⁵, a report commissioned by United Nations Environment Program (UN Environment) was published on Sustainable Public Procurement in India: Selection of priority products and Preliminary Market Assessment⁶. Figure 1 highlights some of these initiatives, regulations, laws and key publications released on SPP over the years.

1 IISD, TERI 2007

2 Hasanbeigi et al. 2019

3 CII 2012

4 MoF, DoE 2018

5 NITI Aayog 2019

6 CII et al. 2019

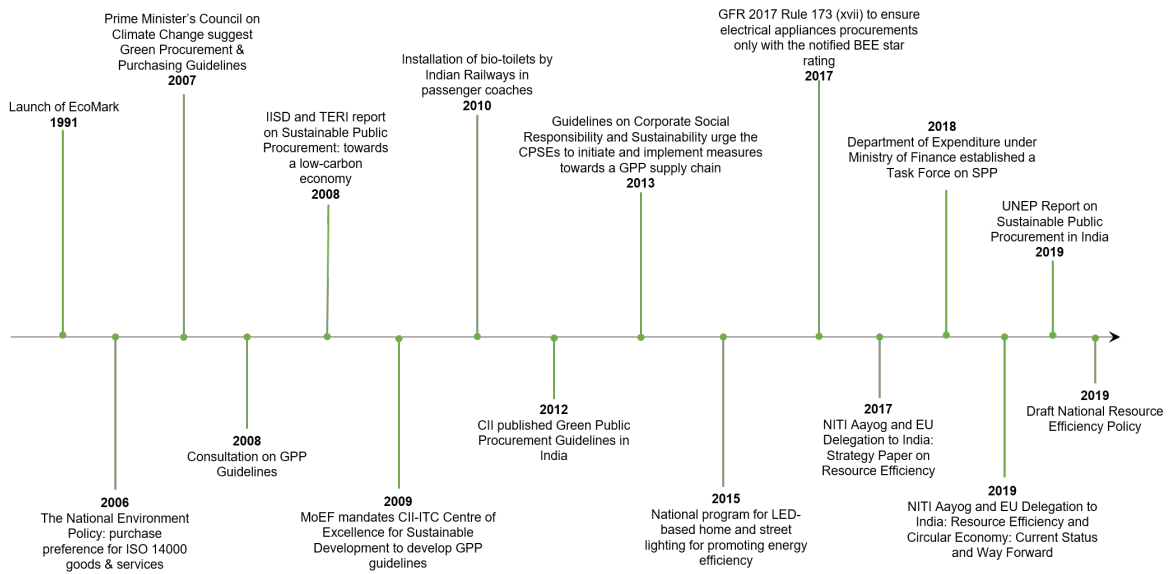


Figure 1: Timeline on various SPP related initiatives in India⁷

2.1. SPP Initiatives in India's Public Sector

The practice of SPP in the public sector has not evolved in a systematic manner, but several public-sector entities (e.g., National Thermal Power Corporation (NTPC), Oil and Natural Gas Commission (ONGC)) and government ministries and departments (Energy, Railways, Tourism, Defence, Highways, Transport, Heavy Industries) have started considering environmental and energy efficiency criteria in their procurement decisions⁸. Table 1 provides highlights of some of the SPP initiatives in the public sector in India.

Table 1: Highlights of SPP initiatives in India's public sector

Indian Railways (IR)

IR has been one of the leading public sector organization in India that has taken interest on SPP. It has over the last decade undertaken several green initiatives such as sourcing solar energy, practicing wastewater recycling and water conservation, using biodegradable and compostable cutlery, just to name a few. It is also committed to meet a target to reduce 33% Greenhouse Gas (GHG) emissions by 2030 with 2005 as the base year by improving traction fuel and energy efficiency⁹. In addition, IR has launched a Green Stations Initiative with the Confederation of Indian Industries (CII).

Indian Railways has installed 82.42 MW Solar and 53 MW Wind power across Railway installations. Two solar power projects of about 2 MW each have been assigned to Bharat Heavy Electricals Limited (BHEL) at Sukhi-Siwania in West Central Railway (WCR) and to Railway Energy Management Company Limited (REMCL) at Diwana in Northern Railways (NR). Vision 2020 document of Indian Railways

⁷ Adapted from: Hazarika, B., Jena, P. R. 2017

⁸ CII et al. 2019

⁹ The Economic Times 2017

has set the key target to utilize at least 10% of its energy requirement from renewable sources. Envisioning this, IR has planned to set up 1000 MW solar power plants, and about 200 MW of wind power plants by 2020-21 across Zonal Railways and Production Units. Of this, 500 MW solar plants are to be installed on the roof top of Railway buildings, which will be used to meet non-traction loads at Railway Stations, etc. About 500 MW land based solar plants will be used to meet both traction & non-traction requirements.

The Government of India, through the Ministry of Renewable Energy, has set the agenda for the adoption of renewable energy through the five-year plan targets. The 12th Plan targets include 15,000 MW through Wind Power, 4000MW through Solar, 2000MW through biomass etc. totalling 30,000MW of capacity addition only through renewable sources. The 13th Plan targets (Year 2022) are equally ambitious. Indian Railways need to follow the national policy to contribute its own share to this plan. Indian Railways Organization for Alternate Fuel (IROAF) was established to explore the possibilities in proliferating new sources of Environment friendly Fuels / Energy in Indian Railways.

Kerala ban on the sale of Compact Fluorescent Lamps

Kerala Finance Minister TM Thomas Isaac Friday made an announcement in 2020 that the State will impose a ban on the sale of Compact Fluorescent Lamps (CFL) and incandescent (filament) bulbs starting as part of a sustainable energy policy. He also added that streetlights and bulbs in government offices across the state will be converted to light-emitting diode (LED) bulbs¹⁰.

GAIL (India)¹¹

GAIL seeks to reduce the environment impacts of their procurement process and also encourages their suppliers to adopt sustainable supply chain practices. "Green Procurement" is an integral part of the sustainability initiatives and outlines GAIL's formal procedures and considerations for purchasing goods and services. GAIL ranks environmental sustainability as one of its top priorities and is committed to following responsible business practices by contributing to environmental protection and enhancing people performance by green procurement and services while ensuring business growth for its supply chain. GAIL has taken the following strategic initiatives towards procurement of energy efficient and sustainable products:

- Loading criteria in tenders for procurements of compressors or turbines or generators for fuel consumption/ star rating of electrical equipment
- Green building concept in all new building projects
- Compulsory buy back of old PCs, laptops, cartridges etc. by supplier providing such new items
- Procurement of LED type new lighting and lighting fixture
- Automatic switching off the light in utility area to avoid extra consumption of power

10 Varma 2020

11 GAIL (India) Limited 2019

- Minimum 3-star rating in the specification while procuring electrical items
- Air conditionings more than 10 years old to be replaced after doing a cost benefit analysis

NTPC¹²

As the country's largest power generator, with its presence across the energy value chain, NTPC recognizes that protecting the environment is essential for sustainable business. In the context of Environment Policy, the definition of environment covers all the domains of environment – Physical, Chemical, Biological and Socio-economic aspect. Hereby NTPC adopts the Environment Policy (2017), which supersedes the earlier policy document of 1995. Amongst other policies, NTPC has made provisions to adopt principles of green procurement by incorporating appropriate provisions in contracts and procurements.

ONGC¹³

ONGC Group is highly committed to ensuring that all their vendors and suppliers operate in a healthy and safe working environment while maintaining the quality of services. A systematic approach is deployed to ensure compliance with applicable labour practice regulations including child labour and human rights aspects, as well as compliance to applicable legal and HSE requirements and code of conducts are incorporated across their supply chain.

ONGC Group encourages that their suppliers maintain effective policies, processes, and procedures to manage their environmental impact. Their supplier base is periodically rationalized based on performance and market requirements. They engage with their supply chain on a range of issues through various Business Partners' and Supplier's Meet from time to time.

A dedicated Supplier Code of Conduct provides guidance on business aspects as well as ethical aspects of operations and for reporting any kind of violations.

Indian Oil¹⁴

Amongst other sustainability initiatives, Indian Oil has created several initiatives on sustainable procurement. Following are few examples:

Compressed Biogas (CBG)

Indian Oil has been at the forefront of the Government of India's SATAT (Sustainable Alternative Towards Affordable Transportation) scheme aiming to produce automotive grade Compressed Biogas (CBG) from agricultural / sewage / organic waste generated in the country. Till 2019-20 end, Indian Oil had issued Letters of Intent to entrepreneurs for setting up 295 CBG plants with cumulative production capacity of 0.6 MMTPA of CBG. If these plant and production capacities are achieved, the annual CBG sold would result in emission reduction of ~1,600 TMTCO_{2e}. During the year, Indian Oil started dispensing CBG from two of its retail outlets under the brand

12 NTPC 2017
13 ONGC 2019
14 IOCL 2019

name “IndiGreen”, with several more retail outlets earmarked for dispensing CBG across the country.

Biodiesel from Used Cooking Oil (UCO)

Indian Oil is spearheading the Repurpose Used Cooking Oil (RUCO) initiative, which aims to produce biodiesel from UCO. Expression of Interest (EOI) has been floated for procurement of Biodiesel produced from UCO across 100 cities initially.

2G Ethanol

Indian Oil plans to set-up three 2G ethanol plants of 100 KL per day capacity each. These plants will generate ethanol from lignocelluloses biomass like paddy straw, wheat straw, cotton stalk, bagasse, etc. The company is currently setting up its first 2G ethanol plant in Panipat, Haryana. 2G ethanol plants

2.2. SPP Initiatives in India's Private Sector

Several Indian companies in the private sector have formulated Sustainable Procurement (SP) policies. These policies mandate that the suppliers meet the principles of SP rather than defining product specifications. Table 2 provides highlights of some of the leading companies in India’s private sector. Although these companies operate on a multi-national scale, the SPP rules are being followed in their operations in India. It may be observed that the SP policies of these companies focus more on sustainability requirements of the supply chain rather than specifying sustainability criteria for the products.

Table 2: Highlights of SP policies in India's private sector

Company name	Key Elements of Sustainable Procurement Policy
Mahindra ¹⁵	Encourages suppliers to deliver products/services with minimal negative impact on environment and adopt safe practices in the cycle from production to delivery. Prefers products that are eco-friendly, energy efficient and less polluting.
Tata Group ¹⁶	Tata companies are actively engaging with their supply chain partners on Environment, Social Governance (ESG) issues through dedicated policies, guidelines, and codes of conduct. The engagement goes beyond audits and assessments and focuses on supporting value chain partners in enhancing their sustainability performance through capability building and knowledge sharing. In addition to working with suppliers, companies are also focusing on sourcing materials that are conflict-free and sustainable in nature. Tata Consumer Products is committed to sustainable beverage production and consumption. As of mid-2019, all the tea sourced for Tetley in their International Business and Tetley Green Tea in India is 100% Rainforest Alliance certified.

15 Tech Mahindra 2020
16 TATA Sustainability Group 2021

Godrej Industries¹⁷	Published Sustainable Procurement policy in 2017. Policy goes beyond mere compliance with the law by drawing upon internationally recognised standards in order to identify and define best practices from across the globe. Accordingly the procurement is influenced.
Clariant¹⁸	Suppliers may be asked to fill out a self-assessment form. This has already happened for specific geographic areas and will be extended where relevant to other regions in the future. Further measures will be defined based on the response and the defined risk profile for the supplier. Audits will be performed at the site, if needed. For suppliers that do not meet Clariant's requirements for responsible dealings, corrective actions will be discussed with the supplier.
Loreal¹⁹	Group has adopted a sustainable supply policy for renewable ingredients. To ensure that these principles are being respected, they carry out audits of suppliers throughout the period of their partnerships. These audits are performed as frequently as possible and, to guarantee their quality and efficiency, they are conducted by an independent third party.
Alstom²⁰	Alstom has created a dedicated Sustainable Sourcing Policy including an Ethics and Sustainable Development Charter for Alstom's Suppliers and Contractors. Alstom has set the objective that all its suppliers and contractors commit to respecting this charter. To ensure suppliers meet these environmental, social and ethical criteria, Alstom works with EcoVadis ²¹ to carry out sustainable development performance evaluations based on the United Nations Global Compact and ISO 26000 standard.
Unilever	Since the early 1990s, Unilever has pioneered a number of programmes and initiatives designed to drive the highest standards of sustainable sourcing within their operations and supply chain, developing them alongside wider industry and multi-stakeholder initiatives. These programmes and policies, notably the Unilever Sustainable Agriculture Code and Responsible Sourcing Policy (RSP) ²² . RSP includes a set of Mandatory Requirements, which all of Unilever's suppliers need to meet to be able to do business with Unilever. Unilever will verify alignment to and implementation of the RSP's Mandatory Requirements through the use of supplier self-declaration, online assessments and – for designated high-risk countries and supplier types – independent verification including third-party audits ²³ .
Lenovo²⁴	The company has implemented sustainability programs across their full supply chain. This includes but is not limited to programs on supplier employee working conditions, environmental footprint and use of environmentally preferred materials. All suppliers are to comply with Lenovo's Supplier Code of Conduct ²⁵ via contractual terms and conditions, and they assess conformance to these requirements in making

17 Godrej Industries (Chemicals) 2017

18 Clariant 2021

19 L'Oréal 2021

20 Alstom 2021

21 Ecovadis 2021

22 Unilever 2021

23 Unilever 2017

24 Lenovo 2021

25 Lenovo 2016

procurement decisions. Lenovo uses over 25 key indicators to measure supplier transparency, commitment, and performance. The results are utilized in overall supplier performance reporting and are key factors in decisions on future business volumes. Similar programs are implemented in the internal manufacturing and logistics operations as well as with packaging materials.

HP²⁶

Supplier sustainability requirements apply to any supplier doing business with HP. The requirements are part of any contract with an HP legal entity that obligates a supplier to comply with HP's sustainability requirements or policies, including the Supplier Code of Conduct. Suppliers need to fill a self-assessment form as well as sign HP's Supplier Sustainability Agreement.

2.3. Enabling Initiatives

MoEF launched in 1995 the Eco-mark label to help promote Green Procurement. Unfortunately, Eco-mark failed in its acceptance. There are now attempts at Central Pollution Control Board (CPCB) to revisit Eco-Mark. As per office memorandum released in 2013, all ministries and departments need to purchase electrical appliances with a specific BEE star rating as prescribed by the government²⁷. Additionally, in 2017, GoI introduced the GFR 2017 Rule 173 (xvii) to ensure electrical appliances procurements only with the notified BEE star rating.

In the Draft Policy for Resource Efficiency released in 2019, there have been provisions made to encourage green public procurement including products manufactured from recycled scrap materials, use of recycled materials etc. In the last two decades CII came up with several green rating and labelling schemes that have influenced the market. Some of these initiatives are described below.

GreenCo Rating was developed by CII and is a holistic framework that evaluates companies on the environmental friendliness of their activities using a life cycle approach. Implementation of GreenCo rating provides leadership and guidance to companies on how to make products, services, and operations greener. Industry personnel are trained on the latest Green concepts and facilitated for implementing better systems and implementing global best practices in green. The Green Company Rating System advocates a performance-based approach. GreenCo rating is applicable to both manufacturing facilities and service sector units. The rating is implemented at unit or facility level. The unit or facility must be in operation for a minimum period of 3 years. In case of new plants/ facilities minimum 2 years operation is required²⁸. In 2019, 347 companies were registered, and 260 companies have been rated and received certification from GreenCo.

Application of GreenCo rating addresses national priorities leading to benefits, such as energy efficiency, water conservation, renewable energy, waste management, green supply chain, etc²⁹.

26 HP n. d.

27 MoF, DoE 2013

28 GreenCo rating System 2019

29 CII 2018

- The Green Company Rating System encourages businesses to employ clean and renewable energy. The goal is to offset 100% of the electrical energy / thermal by renewable energy
- The rating system promotes reuse and recycling of raw materials and discourages use of virgin materials. It even goes a step further in encouraging businesses to ensure that not only they reuse/ recycle raw materials, but their product too should be recyclable/ biodegradable
- The green rating system aims to make businesses aware of these benefits to their bottom-line so that they are encouraged to implement green supply chain processes
- The rating system encourages businesses to design and develop a product that has 'Nil/Least' environmental impact (CO₂, Water, material, and toxic content) during its lifecycle. It guides businesses to perform a comprehensive analysis of all their products on environmental impacts over the lifecycle of the product and explore options for reducing such impacts

GreenPro, also developed by CII, is a Type – 1 Ecolabel which enables the end users in the building sector and manufacturing sector to choose sustainable products, materials, and technologies for reducing the environment impacts during the construction, operation and maintenance of their buildings and factories. GreenPro Ecolabel is accredited by Global Ecolabelling Network (GEN) through GENICES – GEN's Internationally Coordinated Ecolabelling System. A product which bears GreenPro Ecolabel has lower environment impacts and contributes significantly for enhancing the performance of Green Buildings and Green Companies. GreenPro empowers end users with product sustainability information and steers them towards purchasing of sustainable products³⁰. So far more than 1500 products from about 123 companies have been certified by CII under GreenPro³¹.

Benefits for Product Manufacturers³²:

- Supports inclusion of the certified products to complement National & International Green Building Rating systems
- Easier to convince Green building architects, developers, corporates, and consultants
- Differentiates the Green product from the competition
- Enhances the market reach with credible and precise information on the Green features
- Enables Green product innovation

CII-IGBC with the support of Environment Directorate of Indian Railway has developed the Green Railway Stations rating system. IGBC Green Railway Stations rating system is a voluntary and consensus-based programme. IGBC Green Railway Stations rating system is the first of its kind holistic rating in India to address environmental sustainability in Indian railway stations. The overarching objective of the rating is to facilitate adoption of green concepts, thereby reduce the adverse environmental impacts due to station operation & maintenance and enhance the overall commuter experience at station. The rating system will help the station management to understand their present position with respect to the 'green performance' of the station and the measures that need to be taken to enhance the performance on a continual basis³³.

30 GreenPro 2019a

31 GreenPro 2019b

32 Indian Green Building Council 2015b

33 Indian Green Building Council 2015a

Finally, the Guidance Manual under GFR of 2017 allows for preferential purchase of environmentally friendly goods. It lists provisions to include environmental concerns when defining the need of products, framing specifications, use of ecolabels and voluntary environmental standards, and the use of Environmental Management Systems such as ISO 14001 as pre-bid criteria and the use of environmental characteristics apart from quality, price, technical merit, aesthetic, and functional characteristics as bid evaluation criteria.

2.4. Gaps and Challenges

The critical issues facing greater uptake of SPP in India include lack of political support; the absence of a clear legal mandate and guidelines; a lack of knowledge amongst procurement professionals to avoid legal and technical problems during the procurement process (inclusion, evaluation and monitoring); limited knowledge of and experience in using tools such as LCC and LCA; a dependency on experts to define specifications; and the perceived higher costs of greener products. Implementation of SPP/GPP in practice would require not only laws and guidelines, but also a change in attitude amongst producers and consumers. A shift towards understanding that spending public money is an opportunity to foster sustainable development and spurring innovation is needed³⁴.

The paper: Sustainable management at Indian Railways: how a self-evaluation tool for barrier analysis facilitates green procurement³⁵, describes the application of the barrier analysis and, subsequently, how barrier analysis can raise awareness, facilitate the establishment of structures, and thereby advance the green procurement activities of an organization. Certain barriers identified in the barrier analysis have been removed; but many of them still remain, which are hampering the adoption of sustainable management, especially adoption of SPP Policy supported by principles and procedures. In specific, although the GFR encourages that environmental considerations should be included in the evaluation criteria for the selection of the best bid, guidelines on how to apply such frameworks of evaluation are not currently available. For this, there will be a need to obtain information on the environmental and social impacts of the products across the lifecycle. Capacity building is needed for procurement officers with guidance manuals, specification, and bidding documents³⁶.

In order to introduce SPP, Indian Railways may have to look into some reorganisation. Presently the environmental management and housekeeping division looks after the sustainability related initiatives and the procurement division operates independently with not much intersection. If not harmonised, then implementation of SPP could pose a challenge.

According to the Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2018, every Central Ministry /Department / PSUs shall set an annual target for 25% procurement from MSE Sector. However, it may be difficult for MSMEs to meet the sustainability criteria of certifications. Care will have to be taken to ensure that in introducing SPP, the MSME sector is not disadvantaged.

34 UNEP 2013

35 Guenther et al. 2017

36 Guenther et al. 2017

3. INTERNATIONAL SUPPORT TO SPP DEVELOPMENT IN INDIA

3.1. United Nations Environment Programme (UNEP) Initiatives

The UNEP Sustainable Public Procurement Programme (SPP) provides policy support to several countries, including India. The supporting actions are carried out in terms of SPP guidelines³⁷, SPP policy design and implementation, a SPP Training Toolkit³⁸ that can be obtained via the UNEP SPP team, as well as technical assistance. It's involvement in the SPP areas dates back to 2005, when joining the Swiss-led Marrakech Task Force on SPP. Through its participation in the One Planet Network SPP Programme (formerly 10YFP), the UNEP SPP Programme promotes the implementation of SPP on a global level. The programme is co-led by UNEP and is a cooperation between key stakeholders. It aims at promoting and accelerating the implementation of sustainable public procurement on a global level by better understanding SPP benefits and impacts. With regards to support that specifically addresses India and its needs, UNEP carried out various supporting measures. A training program for Indian Railways on Environmental Management and Sustainability was supported by UNEP and included a session on SPP. Furthermore, UNEP funded a scoping study on the identification of products for piloting SPP for the Ministry of Finance. In addition, UNEP is currently supporting a SPP officer within the office of GeM for one year (from February 2020 onwards). UNEPs supporting activities carried out specifically under the umbrella of the program Partnership for Action on Green Economy (PAGE), are depicted in the table below.

Table 3: PAGE - Partnership for Action on Green Economy

Name	Partnership for Action on Green Economy (PAGE) ³⁹
Funding Organization	UNEP
Implementing Organisation(s)	UNEP
Duration	since 2018

India joined the PAGE programme in 2018. One year later, India's Draft National Resource Efficiency Policy was published⁴⁰. With the support of PAGE, a high level **Task Force on Environmental Sustainability** was formed in 2019. It is chaired by the Chairman of the Railway Board and co-chaired by UNEP. The goal is to provide guidance on the planning and supervision of a sustainability roadmap for Indian Railways and to support IR in achieving its green transition. With regard to financial support, India benefitted from a UNEP grant that financed a prioritization study focussing on paper, air conditioning and cleaning products⁴¹. As part of the study, preliminary sustainable purchasing criteria were developed.

Furthermore, a newly created position to support the UNEP office in India was recently staffed (December 2020). The SPP expert is supposed to draft a National SPP action plan

37 UNEP DTIE 2012

38 UNEP 2020

39 PAGE 2020

40 Ministry of Environment, Forest and Climate Change, Government of India 2019

41 CII et al. 2019

for India and support UNEP in engaging with GeM, MoEFFC and the task force in SPP. The position is affiliated with the Norway funded project on **Supporting SPP Implementation in India and Asia Pacific Region**.

3.2. SWITCH-ASIA Initiatives

The SWITCH-Asia Programme has three different components: the Regional Policy Advocacy implemented by UNEP, the Sustainable Consumption and Production Facility implemented by the GIZ, adelphi and the Institute for Global Environmental Strategies (IGES), and the Grants Programme managed by the EU. Through these initiatives, SWITCH-Asia aims to promote sustainable development, contribute to economic prosperity and poverty reduction in Asia, and support the transition to a low-carbon, resource-efficient and circular economy. Within the Regional Policy Advocacy Component a Circular Economy (CE) Academy was carried out with significant participation from Indian professionals. This regional initiative focussed on communication and behavioural change in CE and was conducted in December 2019⁴². The following table lists further support that is specifically targeted at India.

Table 4: India SCP Multi-Stakeholder Consultation

Name	India SCP Multi-Stakeholder Consultation ⁴³
Funding Organization	European Union
Implementing Organisation(s)	SWITCH-Asia and Development Alternatives Group
Duration	28th August 2018

The **multi-stakeholder consultation** was launched to discuss policy and practice issues and to mainstream Sustainable Consumption and Production (SCP) approaches in India. Government representatives, policy makers, banks and businesses participated in the event.

One of the outcomes of the workshop: Indian businesses and industry are beginning to engage with the concept of circular economy and voluntarily initiate practices. Thus, the consultation group agreed that MSMEs need to be more involved to support a transition towards a resource resilient nation.

42 Leadership Academy on Circular Economy, SWITCH-Asia 2019

43 One Planet Network 2020a, SWITCH-Asia 2018

3.3. Other Initiatives

International initiatives supporting the SPP development in India and that are carried out by other organizations are illustrated in the tables below.

Table 5: Technical Assistance to the Indian Resource Efficiency Initiative

Name	Technical Assistance to the Indian Resource Efficiency Initiative
Funding Organization	European Union
Implementing Organisation(s)	Adelphi, Confederation of Indian Industry (CII), Gesellschaft für Internationale Zusammenarbeit (GIZ), The Energy and Resource Institute (TERI)
Duration	2017 - 2020

Within the framework of the **EU-India Resource Efficiency Initiative (EU-REI)**, adelphi, together with its partners, prepared two sectoral studies. In the first study **Fostering Resource Efficiency in the Indian Building and Construction Sector**⁴⁴ one suggested key action to drive resource efficiency is to increase the use of more locally sourced sustainable resources and recycled products as building materials. This action needs to be supplemented by awareness raising, capacity building and promotion campaigns, where local procurement of green products can be endorsed as well.

With the introduction of the Plastic Waste Management Rules and E-Waste Management Rules in 2016, the Indian government reaffirmed the importance of Extended Producer Responsibility (EPR) as a central policy approach to manage the country's growing amounts of waste. This is the main subject of the second study **Enhancing Resource Efficiency through Extended Producer Responsibility – Sector Study on Plastic Packaging and E-Waste Management in India**⁴⁵. One suggested key action to increase the market penetration of resource efficient products and materials, is to develop and apply GPP criteria for circular and resource efficient materials. During various stakeholder consultations it was pointed out that GPP can be a useful tool to create the much-needed pull effect for resource efficient products. A first step, which could be undertaken by the Indian government is to develop specific criteria that relate to resource efficiency and circular economy. The study also stresses, that in order to fully harness the resource efficient potential of GPP in India, the development of criteria needs to be accompanied by targeted capacity building measures for procurement managers and the federal and state level.

In addition to the above-mentioned studies, a new training programme on resource efficiency and circular economy has been launched in November 2020 in the framework of the EU-REI. The programme also includes training modules on GPP.⁴⁶

44 Restle et al. 2018

45 Hemkhaus et al. 2018

46 adelphi 2021

4. RECOMMENDATIONS

For the purpose of this paper and the development of an SPP action plan following this work, the project team defines recommendations that are relevant for IR.

The recommendations resulting from Chapters 2 and 3 are:

- IR could use the provisions listed in the Guidance Manual under GFR (of 2017) for the implementation of SPP.
- IR may consider using GreenPro requirements in tendering as there are now a large number of GreenPro certified suppliers available in the market. It may consider GreenCo certification as mandatory for all its major suppliers.
- With regard to the identification of priority products / services: IR could adopt and modify the product selection as well as the criteria developed in the prioritization study (see table 3), conducted within the PAGE programme. Requirement of having a GreenPro certification could also be considered.
- Alternately, IR may consider including sustainability criteria in the scoring scheme with weights given on vendor (e.g. whether GreenCo certified) or product (e.g. whether GreenPro certified).
- IR may consider the use of more locally sourced sustainable resources and recycled products by increasing the share of (local) MSMEs in the procurement process. In addition, the measures taken by IR to increase the share of MSMEs participating in public bidding processes in 2012 (see table 4), can be pursued as key action points in the framework of the action plan. Similarly, the SCP multi-stakeholder consultation (see table 5) came to the conclusion that MSMEs need to be more involved in GPP in order to support a transition towards a resource resilient nation. Hence, the action plan for IR can cover these aspects, in terms of a sustainable policy, to ensure that MSMEs are able to contribute their (innovative and green) products and services in the GPP bidding process. IR could support the actions by awareness raising and capacity building, where in particular local procurement of green products can be endorsed.
- Thus, IR may develop specific criteria, which particularly relate to resource efficiency and circular economy. It is important that for implementation of SPP, training programs for building capacities within IR and for building readiness in the market will be conducted on a programmatic basis.
- IR could participate in and contribute to the training programme on resource efficiency and circular economy that was recently initiated in the framework of the EU-REI programme (see table 6). New training workshops are planned from 2021 to 2023.
- Awareness program on SPP for procurement officers has been conducted at NAIR in October 2020. A more hands on program may be conducted as a follow up in April, 2021. In addition, a short program on understanding of SPP should be conducted for vendors, especially the MSMEs.

BIBLIOGRAPHY

adelphi 2021: Taking the Next Step towards Resource Efficiency and Circular Economy in India. Last viewed on 14 January 2021 at: <https://www.adelphi.de/en/news/taking-next-step-towards-resource-efficiency-and-circular-economy-india>.

Alstom 2021: Building a fairer, safer, greener supply chain. Last viewed on 13 January 2021 at: <https://www.alstom.com/commitments/sustainable-sourcing>.

CII 2012: Green Public Procurement Guidelines in India. New Delhi: CII-ITC Centre of Excellence for Sustainable Development. Last viewed on 13 January 2021 at: https://www.esmap.org/sites/default/files/esmap-files/India%20GPP_World%20Bank.pdf.

CII 2018: Green Company Rating System : Abridged Reference Guide – Version 3. Hyderabad : CII - - Sohrabji Godrej Green Business Centre. Last viewed on 13 January 2021 at: [http://www.greenco.in/gco/refguides/GreenCo%20Rating%20system%20-%20Version%203%20Guidelines%20%20for%20Manufacturing%20\(Available%20for%20download\).pdf](http://www.greenco.in/gco/refguides/GreenCo%20Rating%20system%20-%20Version%203%20Guidelines%20%20for%20Manufacturing%20(Available%20for%20download).pdf).

CII, EDS, TERI, UNEP, USAID 2019: Sustainable Public Procurement in India: Selection of priority products and Preliminary Market Assessment. Last viewed on 13 January 2021 at: <https://sustainabledevelopment.in/wp-content/uploads/2020/06/1592393377Sustainable-Public-Procurement.pdf>.

Clariant 2021: Sustainable Supply Chains. Last viewed on 13 January 2021 at: <https://www.clariant.com/en/Sustainability/Value-Chain-Collaboration/Sustainable-Supply-Chains>.

Ecovadis 2021: The World's Most Trusted Business Sustainability Ratings. Last viewed on 13 January 2021 at: <https://ecovadis.com/>.

GAIL (India) Limited 2019: Sustainability Report 2018-19: Execution, Efficiency, Excellence. Last viewed on 13 January 2021 at: <https://www.gailonline.com/pdf/Sustainability/GAIL%20Sustainability%20Report%20FY%202018-19.pdf>.

Godrej Industries (Chemicals) 2017: Sustainable Procurement Policy. Last Viewed on 13 January 2021 at: https://www.godrejindustries.com/public/uploads/codes-and-policies/GIL%20Chemicals/GIL_Chemicals_Sustainable_Procurement_Policy.pdf.

GreenCo Rating System 2019: About GreenCo Rating System. Last Viewed on 13 January 2021 at: <http://www.greenco.in/gco/aboutgreencorating.php>.

GreenPro 2019a: About Us. Last Viewed on 13 January 2021 at: <https://ciigreenpro.com/#:~:text=Over%201500%20Building%20Products%20Achieve%20GreenPro%20Ecolabel>.

GreenPro 2019b: Website – Landing Page. Last Viewed on 13 January 2021 at: <https://ciigreenpro.com/about>.

Guenther, E., Hueske, A.K., Kumar, S., Parthasarathy, R. 2017: Sustainable management at Indian Railways: how a self-evaluation tool for barrier analysis facilitates green procurement.

In: uwf 25, 235–246. Last Viewed on 13 January 2021 at:
https://www.oneplanetnetwork.org/sites/default/files/sustainable_procurement_in_india.pdf.

Hasanbeigi, A., Becque, R., Springer, C. 2019. Curbing Carbon from Consumption: The role of Green Public Procurement. San Francisco CA: Global Efficiency Intelligence. Last Viewed on 13 January 2021 at: <https://www.climateworks.org/wp-content/uploads/2019/09/Green-Public-Procurement-Final-28Aug2019.pdf>.

Hazarika, B., Jena, P. R. 2017: Public Procurement in India: Assessment of Institutional Mechanism, Challenges, and Reforms. NIPFP Working paper series No. 204. New Delhi: National Institute of Public Finance and Policy. Last viewed on 13 January 2021 at: <http://www.nipfp.org.in/publications/working-papers/1797/P>.

Hemkaus, M., Henzler, M., Hilber, S., Mehra, G., Gaurav, J. K., Eisinger, F. 2018: Enhancing Resource Efficiency through Extended Producer Responsibility- Sector Study on Plastic Packaging and E-waste Management in India. New Delhi: European Union's Resource Efficiency Initiative (EU-REI) Project. Last viewed on 17 December 2020 at: https://www.adelphi.de/en/system/files/mediathek/bilder/Hemkhaus%20et%20al_2018_Enhancing%20RE%20through%20EPR.pdf

HP n. d.: Supplier sustainability requirements. Last viewed on 13 January 2021 at: <https://h20195.www2.hp.com/v2/GetDocument.aspx?docname=c06610555>.

IISD, TERI 2007: State of Play in Sustainable Public Procurement. Winnipeg, Manitoba: International Institute for sustainable Development. Last viewed on 13 January 2021 at: https://www.iisd.org/system/files/publications/state_procurement.pdf

Indian Green Building Council 2015a: IGBC Green Railway Stations. Last viewed on 13 January 2021 at: <https://igbc.in/igbc/redirectHtml.htm?redVal=showGreenRailwaynosign>.

Indian Green Building Council 2015b: GreenPro. Last viewed on 13 January 2021 at: <https://igbc.in/igbc/redirectHtml.htm?redVal=showGreenPronosign>.

Indian Oil (IOCL) 2019-2020: Sustainability Report. Last viewed on 22 January 2021 <https://iocl.com/IOCL-Sustainability-Report-2019-20.pdf>

Leadership Academy on Circular Economy 2019: SWITCH-Asia. Last viewed on 24 January 2020: https://www.switch-asia.eu/site/assets/files/2699/fullreport-_2019_leadership_academy.pdf

Lenovo 2016: Lenovo Supplier Code of Conduct, Version 1.0. Last viewed on 13 January 2021 at: <https://www.lenovo.com/medias/Supplier-Code-of-Conduct.pdf?context=bWFzdGVyfHNvY2lhbF9yZXRnwb25zaWJpbGI0eXwxMjg1MzI8YXBwbGJjYXRpb24vcGRmfHNvY2lhbF9yZXRnwb25zaWJpbGI0eS9oNTMvaDE3LzgzMzExMDg4NzlyMjJlucGRmfDY0OGU5NDQ4ZmEyNzIxMDI4NGQ1ZGFjMzZlZThmNjZlZTY5YThlYjM3NDh1MjU5ZQ0mZBhZjBIYzExYTVjODU>.

Lenovo 2021: Global Supply Chain. Last viewed on 13 January 2021 at: https://www.lenovo.com/in/en/social_responsibility/global_supply_chain/.

L'Oréal 2021: A sustainable purchasing policy. Last viewed on 13 January 2021 at: <https://www.loreal.com/en/articles/audiences/2020/03/06/09/31/a-sustainable-purchasing-policy/>.

Ministry of Environment, Forest and Climate Change, Government of India 2019: National Resource Efficiency Policy (Draft). Last viewed on 14 January 2021 at: <http://moef.gov.in/wp-content/uploads/2019/07/Draft-National-Resourc.pdf>.

Ministry of Finance (MoF), Department of Expenditure Procurement Policy Division (DoE) 2013: No. 26/6/12-PPD, Office Memorandum: Procurement of energy efficient electrical appliances. Last viewed on 13 January 2021 at: https://doe.gov.in/sites/default/files/OM_energy_ElecAppl_0.pdf.

Ministry of Finance (MoF), Department of Expenditure Procurement Policy Division (DoE) 2018: No. F. 18/22/2017-PPD, Office Memorandum: Task Force on Sustainable Public Procurement. Last viewed on 13 January 2021 at: <https://doe.gov.in/sites/default/files/Task%20Force%20on%20Sustainable%20Public%20Procurement.pdf>.

NITI Aayog 2019: Resource Efficiency & Circular Economy: Current Status And Way Forward. Last viewed on 13 January 2021 at: https://www.eu-rei.com/pdf/publication/NA_EU_Status%20Paper%20&%20Way%20Forward_Jan%202019.pdf.

NTPC 2017: Environment Policy-2017. Last viewed on 13 January 2021 at: <https://www.ntpc.co.in/sites/default/files/downloads/EnvironmentPolicy2017.pdf>.

ONGC 2019: ONGC Group Sustainability Report FY'2019. Last viewed on 13 January 2021 at: https://www.ongcindia.com/wps/wcm/connect/99f8d113-e7b5-4457-9813-fbea0039efd5/sustain2030201.pdf?MOD=AJPERES&CONVERT_TO=url&CACHEID=ROOTWORKSPACE-99f8d113-e7b5-4457-9813-fbea0039efd5-n3TC.zS.

One Planet Network 2020a: EVENT: India SCP Multi-stakeholder consultation. Last viewed on 17 December 2020 at: <https://www.oneplanetnetwork.org/event-india-scp-multi-stakeholder-consultation>

One Planet Network 2020b: Increasing Share of Micro & Small Enterprises in Public Procurement in Indian Railways. Last viewed on 17 December 2020 at: <https://www.oneplanetnetwork.org/initiative/increasing-share-micro-small-enterprises-public-procurement-indian-railways>

PAGE 2020: India – Joined Pages 2018. Last viewed on 17 December 2020 at: <https://www.un-page.org/India%20Country>

Restle, J., Hemkhaus, M., Henzler, M., Intrau, M. Hilber, S., Garauv, J. K. 2018: Fostering Resource Efficiency in the Indian Building and Construction Sector. New Delhi: EU-REI, GIZ. Last viewed on 14 January 2021 at: https://www.adelphi.de/de/system/files/mediathek/bilder/Restle%20et%20al_2018_Resource%20Efficiency%20in%20Building%20and%20Construction.pdf.

SWITCH-Asia 2018: India SCP Multi-Stakeholder Consultation – Proceedings Documents. Last viewed on 17 December 2020 at:
https://www.oneplanetnetwork.org/sites/default/files/scp_dialogue_-_proceedings.pdf

Tech Mahindra 2020: Green Procurement Policy. Last viewed on 13 January 2021 at:
<https://cache.techmahindra.com/static/img/pdf/Green-Procurement-Policy.pdf>.

The Economic Times 2017: Railways to reduce emission by 33 per cent by 2030. Last viewed on 13 January 2021 at:
<https://economictimes.indiatimes.com/industry/transportation/railways/railways-to-reduce-emission-by-33-per-cent-by-2030/articleshow/58985571.cms>.

UNEP DTIE 2012: Sustainable Public Procurement Implementation Guidelines: Introducing UNEPS's Approach. Last viewed on 17 December 2020 at:
https://www.oneplanetnetwork.org/sites/default/files/sustainable_public_procurement_implementation_guidelines.pdf.

UNEP 2013: Sustainable Public Procurement: A Global Review: Final Report. Paris: UNEP DTI Sustainable Consumption and Production Branch. Last viewed on 13 January 2021 at:
<https://globalecolabelling.net/assets/Documents/unep-spp-report.pdf>.

UNEP 2020: UNEP's Training Toolkit Terms of Use. Last viewed on 17 December 2020 at:
<https://www.oneplanetnetwork.org/uneps-spp-training-toolkit>.

Unilever 2017: Unilever Responsible Sourcing Policy: Working in Partnership with our suppliers. Last viewed on 13 January 2021 at:
https://www.unilever.com/Images/responsible-sourcing-policy-interactive-final_tcm244-504736_en.pdf.

Unilever 2021: Our approach to sustainable sourcing. Last viewed on 13 January 2021 at:
<https://www.unilever.com/sustainable-living/reducing-environmental-impact/sustainable-sourcing/our-approach-to-sustainable-sourcing/>.

Varma, V. 2020: Explained: Behind Kerala's ban on CFL and filament bulbs from November 2020. In: The Indian Express. Last viewed on 13 January 2021 at:
<https://indianexpress.com/article/explained/explained-behind-keralas-ban-on-cfl-and-filament-bulbs-from-november-2020-6256059/>.