

Cleaner production initiatives in Sri Lanka

National Cleaner Production Center Sri Lanka

<http://www.ncpcsrilanka.org>

METABUILD

Project Resource efficient supply chain for metal products in building sector in South Asia (METABUILD) is an ongoing project of NCPC. Metal sector with a huge potential in resource saving is a new segment to NCPC. Generally metal sector operations like degreasing, pickling, galvanic baths use acids and the wastewater is highly polluted. Further, waste, high energy consumption and pollution are major concerns due to lack of material stream and waste management systems which also lead to reduced profits. Also the metal sector lacks awareness about best practices in RECP; knowledge of technical solutions and financial options for RECP implementing.

As a solution, centre will provide consultancy services to 80 metal processing industries to improve their resource efficiency. The Energy and Resources Institute (TERI), the adelphi research gGmbH, Austria Recycling Vereinzur Förderung von (AREC) and STENUM Asia Sustainable Development Society (STENUM Asia) are engaged in implementing this project.

Eco Innovation

As global trends: environmental, social, technological drivers continue to shift the foundations of current business models. Incremental innovation stand alone has become less sufficient in enabling industries to succeed. Identifying the need for adopting fundamentally different approaches to innovation, United Nations Environment Programme (UNEP) introduced "Eco Innovation". The concept aims to fully uncover its value creation potential for a company through incorporating sustainability. Project is being implemented in 6 agri-food industries (Dairy, Cinnamon, Desiccated Coconut, Fruit processing and soy manufacturing) in Sri Lanka for last one and half years mainly targeting to increase profitability through a critical analysis over life cycle of companies. Concept is being proven by UNEP publishing case studies from different countries that it brings out increased performances of businesses.

Green Chemistry and Technologies

Chemicals have made our lives easier and today it is an indispensable resource. However, the increasing usage of chemicals in industrial processes poses a considerable threat to the Health Safety and Environment (HSE) aspects of the organizations. These effects can be observed throughout the supply chain from the point of sourcing to the point of consumption. As the country's premier provider of sustainability solutions, NCPC has come forward in partnership with UNIDO and Yale University, USA to address

these concerns in local industries with its new project on "Green Chemistry and Technologies"

Chemical Leasing

Chemical Leasing is a new strategy introduced by UNIDO to reduce the consumption of chemicals and minimizes harmful environmental impacts caused by them. The novelty in Chemical Leasing is that it brings together the supplier and the user to form a partnership through which chemicals are used more efficiently and in an environmentally sound manner.

Chemical Leasing strives for a win-win situation and aims at increasing the efficient use of chemicals while reducing the risks of chemicals and protecting human health. It is cost effective to both the supplier and the user. It also improves the economic and environmental performance of participating companies and enhances their access to new markets. Key elements of successful Chemical Leasing business models are proper benefit sharing, high quality standards and mutual trust between participating companies.

The traditional business model

According to the traditional system chemicals are a commodity that are sold by suppliers and bought by users. Therefore users now become the sole owners of these materials which mean that they are responsible for the storage, usage, management and disposal of chemicals. The supplier has a clear economic interest to sell more quantities of chemicals to the user and this practice can lead to high chemical wastage. If the consumer on the other hand takes measures to reduce his consumption it can have a negative business impact on the supplier.

Chemical leasing business model

Chemical Leasing is a service-oriented business model that shifts the focus from increasing sales volume of chemicals towards a value-added approach. The supplier sells the functions performed by the chemical instead of the chemical itself and these functional units become the basis for payment. In this business models the responsibility of the supplier is extended beyond selling of chemicals to include the entire lifecycle of the chemical.

Chemical leasing activities

Chemical Leasing is a new concept being introduced in the country to reduce environmental impacts of chemicals through the development of a synergy between user and supplier. NCPC offers awareness and training services to interested industries.

Green Technology in Malaysia

Malaysian Investment Development Authority, Malaysia

<http://www.mida.gov.my>

In line with Malaysia's aim to become an inclusive and sustainable advanced nation by 2020, Green Technology (GT) has been identified as one of the drivers of the future economy for the nation that would contribute to the overall Green Growth and Sustainable Development. Under the National Green Technology Policy, the cross-sectoral GT focuses on four sectors namely energy, building, waste management and transportation.

Renewable energy

Malaysia is emphasizing greater importance for Renewable Energy (RE) generation through specifically formulated policies and initiatives to spur the growth of the sector as a major step towards green economy. Other than the Feed-in-Tariff (FiT) mechanism, the Net Energy Metering (NEM) and Large Scale Solar (LSS) Photovoltaic plant schemes were introduced in 2016 to boost RE generation. NEM benefits users in terms of savings in electricity bill through lower electricity usage and energy credit from solar power generation while LSS allows developers to produce renewable energy in larger capacities.

In 2016, a total of 111 projects in renewable energy with total investments of RM1.9 billion were approved incentives. Out of the total, RM1.7 billion (88%) were from domestic sources and RM233.8 million (12%) were from foreign sources. These projects are expected to create 615 employment opportunities in this sub-sector.

The approved investments include 81 projects (RM588.8 million) that will generate energy from solar power, 12 projects (RM145.7 million) from biogas, 10 projects (RM806.6 million) from mini-hydro and six (6) projects (RM343.6 million) from biomass as the sources of energy generation.

Energy efficiency

As price of energy steadily increases over the years, there is a need to adopt energy efficiency measures to ensure productive use of energy and minimize waste. The use and adoption of energy efficiency systems and technology is encouraged through introduction of incentives and import duty exemptions on qualified machines and components. Consecutively, energy efficiency activities also open up opportunities for energy service companies (ESCOs) to provide energy efficiency services to potential clients.

In 2016, a total of 19 projects in energy efficiency with total investments of RM248.5 million were approved incentives. Investments were mainly from domestic sources i.e. RM235.6 million (95%) meanwhile RM12.9 million (5%) were from foreign sources. These investments are expected to provide 142 employment opportunities in the sub-sector.

Green technology incentive

Under the provision of Budget 2014, tax incentives for Green Technology in the form of Green Investment Tax Allowance (ITA) for the purchase of green technology assets and Income Tax Exemption (ITE) on the use of green technology services and system were introduced to further strengthen the development of green technology.

Application for incentive is to be submitted to MIDA for green technology projects and services, and to Malaysian Green Technology Corporation (MGTC) for purchase of green technology assets as listed in MyHijau Directory, by 31 December 2020. Projects which qualify for this incentive are renewable energy; energy efficiency; integrated waste management and green building / green data centre. In addition, eligible services activities include system integration of renewable energy; energy services; services related to green building / green data centre; green certification of products, equipment & building; and green township.

Asia Sustainable and Alternative Energy Program

The Asia Sustainable and Alternative Energy Program (ASTAE) is a global partnership to scale up the use of sustainable energy in the Asia-Pacific region in order to reduce energy poverty and protect the environment. Achieving this objective rests on promoting ASTAE's three pillars for sustainable development: renewable energy, energy efficiency, and access to energy. Activities that support countries in adapting to and mitigating the impacts of climate change cut across these three pillars.

ASTAE helps accelerate and intensify early-stage energy sector innovations. The program assists to conduct a study, hire a consultant, or test a promising "first of its kind" concept which in turn can inform the direction of a World Bank investment project or help alter its course in the case of rapidly evolving conditions during the implementation phase. To better support World Bank investment projects and enable private sector investment, ASTAE also shares best practices to improve institutional, policy, financial, legal, and regulatory frameworks across the region.

For more information, access:
<https://www.astae.net>