Cleaner Production News

March 2021

Announcing globally recognized Ecolabelling Certification Scheme awarded by NCPCSL

"Ecolabelling" is a voluntary method of environmental performance certification and labelling that is practiced around the world. An eco-label identifies products or services proven environmentally preferable overall, within a specific product or service category.

We are humbled to announce that NCPC Sri Lanka established a globally recognized Eco label Certification scheme to certify eco-Friendly products under the international standard on ISO 14024:2018 Environmental labels and declarations. As a milestone of the journey for Building the Pathway towards Eco Labelling in Sri Lanka, NCPC has received global recognition for the NCPC eco-labelling scheme by the associate membership of the Global Eco Labelling Network (GEN) in 2020.

Currently, we are calling for applications from diary industries for Eco labelling certification of dairy product categories and in the process of expanding the Eco labelling certification for tea and other product categories.

Obtaining a globally recognized Eco-labelling certification for your products has several major benefits as Informing consumer choice, promoting economic efficiency, Improving Resource Efficiency, stimulating market development, encouraging continuous improvement, Promoting certification, etc.

Beyond the Boundary

Featuring

Eng. Ananda Namal

"In my personal view, I do not support the waste to energy concept"

On 70% renewable energy by 2030...
"I do not think this would be a target that we would be able to achieve"

Find out more on page 08

Inside Stories...

Capacity Building on Eco-Innovation for the Chemical Supply Chain of Construction Sector

National Cleaner Production Centre Sri Lanka (NCPCSL) together with United Nations Environment Program (UNEP) are working jointly to support the implementation of the 2nd component of GEF funded project on Global best practices on emerging chemical policy issues of concern under the Strategic Approach to International Chemicals Management in Sri Lanka. The Green Building Council of Sri Lanka (GBCSL) will partner with NCPCSL team in the implementation of this project during the 3 year project period.

Through this project, it is expected to become accustomed to new global tools and guidance to the local context in order to reduce the use of chemicals of concern (CoC) in the construction sector. Apart from that, the successful implementation of this project would result in training and support for government and value chain actors to trial and adopt new guidance wherein the tools will so be provided.

In order to enhance the knowledge of the industries, a training program was conducted via online platforms on the topic of Eco-Innovations. This special training program targeted the technical experts of the NCPCSL and the representatives from the construction sector relating to the project scope. As an outcome of this project, 12 industries would be benefited from the implementation of Eco-Innovation.

The Eco-Innovation supplement on Building Materials aims to use the framework provided in the Eco-Innovation manual and provide a methodology, templates, and a comprehensive series of resources for SME companies in the construction sector. This aims to improve the sustainability and the efficiency of existing practices and to provide new ideas for both products and business models. The manual provides sector-specific guidance as well as examples on how to get the most out of the external partnerships, both within the building value chain and beyond, such as with academic and research institutions.

The training was conducted by Bioregional under the supervision of UNEP. Bioregional was founded as a charity and social enterprise in 1994 by Sue Riddlestone and Pooran Desai, two environmental entrepreneurs based in South London, who wanted to develop more sustainable ways of living. Bioregional has been a leader in driving the transition towards more sustainable homes and communities, businesses, and lifestyles for over 25 years.

In 2020, Bioregional was appointed by the UN Environment Program to work alongside NCPCSL to develop a supplement on sustainable building materials, as part of its Eco-Innovation toolkit for SMEs. Bioregional aims to draw on these experiences of assessing impacts of building materials, identify ways to reduce these impacts, and develop alternatives.

On behalf of the Bioregional, the training program was conducted by Stewart Muir and Douglas Fraser.

Stewart Muir (Project Manager)

Stewart manages projects in Bioregional's Sustainable Business team, related to improving sustainability aspects of product ranges and supply chain practice.

Douglas Fraser (Project Officer)

Douglas helps a range of private and public sector partners devise and deliver their sustainability action plans. His role is primarily within the sustainable business team and involves calculating corporate Greenhouse Gas (GHG) footprints, helping companies set science-based targets (SBTs) on GHG reductions, and develop strategies to achieve these, and ensuring partners achieve a high standard of sustainability data reporting.

The training consisted of six modules which were covered within a period of 3 weeks. The first module of the training explained the target identification and evaluating sustainability hotspots. The second module was held to give a thorough idea of assessing and developing a value chain and conducting PESTEL analysis to identify the opportunities. In the third module, the attendees were trained to understand the current operational performances and to capture the current scenario. Then they were given the opportunity to conduct a SWOT analysis in a given case study.

In the fourth module, attendees were enlightened on bringing Eco-Innovative building materials to market and to establish the strategic goals while defining products, markets, and selling points. The fifth module was included with the explanation of the Passivhaus standard and the generation and evaluation of Eco-Innovation business models. In the final module, implementation and reviewing of Eco-innovation projects were discussed.

Apart from the technical experts of NCPCSL, representatives of UNEP, Green Building Council Sri Lanka, attendees from the paint, and cement sectors actively participated in the program.

Completion of Climate Smart City Project

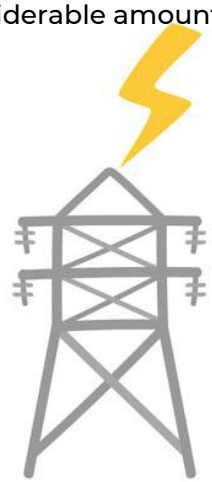
"Climate change", a phrase that is commonly used in recent times. Although the phrase is seen to be common among the populace, the cause is still a mystery to many. Urbanization is one of the root causes of climate change at present. The United Nations estimated that more than half the world's population (55%) now live in an urban area, and this figure will only increase at a steady rate. Due to the increased population growth in urban areas, resource consumption in the urban area also arises along with it. This causes the urban areas to face resource scarcity, higher generation of waste, energy consumption, and a rise in transport units. All the above-mentioned factors have a major impact on the environment and it results in "Climate change".

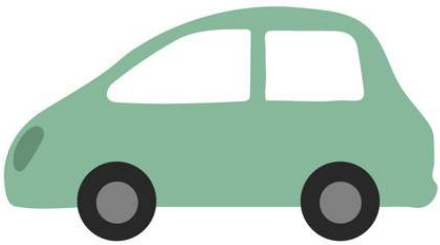
Kurunegala City, located in the North-Western Province of Sri Lanka, is one of the most intensively developing economic and administrative capitals. The population growth rate of Kurunegala city is approximately 0.317%, which is relatively high, considering the residential area. Kurunegala is one of the central cities in Sri Lanka and is connected to main cities such as Colombo, Kandy, Dambulla, Negombo, Anuradhapura, and Kegalle. The geographical characteristic of the city and the condition of the road cause severe traffic congestion, and the growing population increases energy consumption and the generation of waste.

The project is funded by Climate Technology Centre & Network (CTCN) and the project implementer is Econetwork Inc. of the Republic of Korea. The primary rationale of the proposed assignment is to carry out

National Cleaner Production Centre, Sri Lanka (NCPSCL) was the local consultant to the project and played a major part in the success of this project. Three stakeholder meetings were organized by NCPCSL at Kurunegala in various venues, in order to gather the local stakeholders representing various sectors and to brief them about the project progress, conducting capacity building activities, and presenting the Greenhouse Gas (GHG) Inventory prepared. Technologies considered to be climate-smart, to be more elaborate, which are able to tackle the issue of increasing levels of GHG emissions were selected. With the help of feasibility studies and experts' evaluation, 10 technologies were selected for implementation in the city of Kurunegala. The reason why these technologies were selected was that it was found out that direct emissions are the major contributing factor to the emissions level and each year it is increasing at a steady rate. In 2019, the transport sector has been the major sector that contributes to the emission levels. The following sector which contributes a considerable amount being electricity use.

The city of Kurunegala now has the responsibility of continuing the outputs of this project. Continuing the GHG Inventory, climate-smart technology identification, their implementation, and their progress monitoring must be done regularly. Continuing in this pathway would mean the city would reap a ton of benefits by converting itself into a climate-smart city. The populace of Kurunegala would be experiencing a clean environment, the standard of living would increase, and many other cities on the island would follow suit. Other cities following, would mean Sri Lanka as a country would become a "climate-smart" country. NCPCSL was an establishment to offer technical assistance to climate-smart city development and is also willing to help out any other cities to convert themselves into climate-smart cities.





Energy & Transport combined

2017: 126,686.0 tCO2e

2018: 136,563.9 tCO2e

2019: 143,705.1 tCO2e

Waste

2017: 14526.09 tCO2e

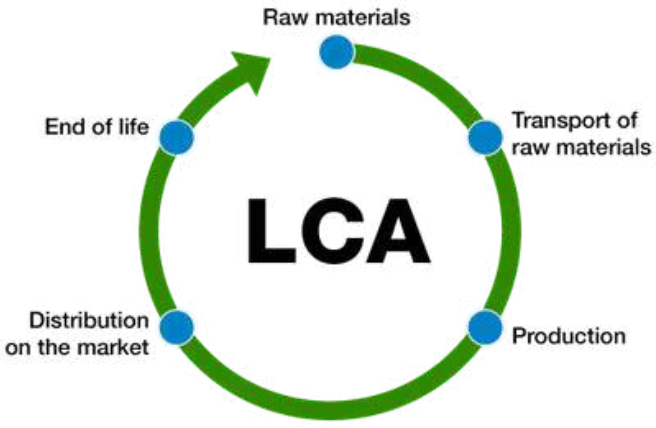
2018: 13058.74 tCO2e

2019: 13242.01 tCO2e

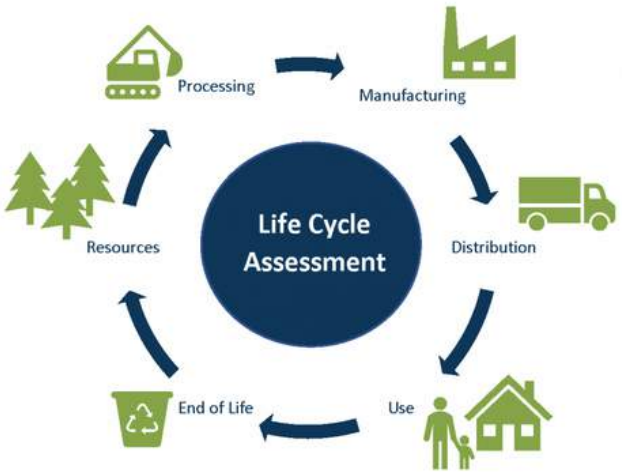
Emissions by sector in the year 2017, 2018, and 2019

GIZ Sri Lanka, Eco Invent Association, Switzerland & NCPCSL join hands to advance "Life Cycle Based Sustainability Assessment" in Sri Lanka

Life Cycle Assessment (LCA) offers great insights into the environmental performance of products or processes. LCA is a powerful approach to assist all stakeholders to achieve the reduction of greenhouse gas emissions (GHG) and to systematically uncover the main drivers on the way towards more environmental sustainability of economic activities. For conducting LCA studies, life cycle inventory (LCI) data on resource requirements and environmental interventions are the key inputs. Valuable and significant LCA results can be obtained when high-quality data appropriate to the locational scenarios is selected as the input. The assessment conducted would reflect the local situation in terms of raw materials, utilities, technology levels, waste management practices, etc. This creates the requirement of a national LCA database for the country that could provide country-specific data in a more robust, consistent, and compatible manner for standard LCA practice.



The National Cleaner Production Centre, Sri Lanka (NCPCSL) is a frontrunner in the field of LCA in Sri Lanka, contributing to the introduction of the concept and undertaking projects for enhancing the knowledge base as well as acting as a facilitator to promote the LCA approach on the island. In the period from 2005 to 2019 as a milestone of that journey, a roadmap and action plan for the creation of an LCA database in Sri Lanka was established by NCPC Sri Lanka with extensive stakeholder participation in 2019 under the Development of National LCA Database Roadmaps project, commissioned by UNEP and funded by the European Commission despite broad stakeholder support.



For strengthening this journey of incorporating lifecycle thinking as the main drivers of environmental impacts and to quantify the improvement potential of economic activities in the product decision making, NCPCSL joined in hands with GIZ Sri Lanka and Eco Invent Association, Switzerland to implement the project on “Advancing Life Cycle based Sustainability Assessment” in Sri Lanka.

The project is implemented for Textile and

apparel sector, with a one-year time period from Jan 2021-Jan 2022 with the overall aim to promote life cycle thinking and strengthen the human capacity, data, and digital infrastructure required for advancing life cycle studies. The project implementation measures contribute to the BMZ Strategy 2030 for Sri Lanka of the Federal Ministry of Economic cooperation and development of Germany by strengthening local experts in the LCA community in Sri Lanka. The technical partner of the project, the ecoinvent Association is the Global Giant in the LCI database development process and that has been established in 2013 and is headquartered in Zurich, Switzerland. In addition to providing the ecoinvent database, the ecoinvent Association aims to promote the practical application of life cycle assessment data worldwide.

The three main objectives of the project are

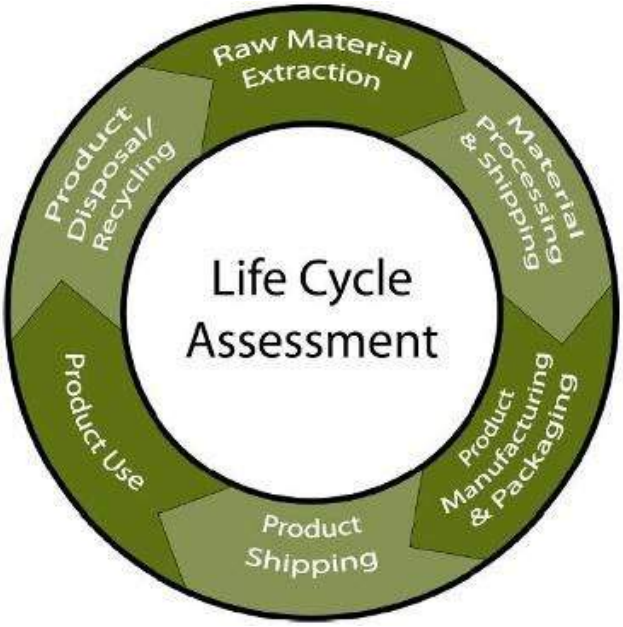
1. Knowledge sharing:

- Present core frameworks, data sources and tools
- Exchange key experiences, insights, and impacts achieved from practical applications
- Identify and explore potential links to the national policy or business context and to international initiatives

2. LCI Database Development for the Textile and apparel sector Sri Lanka

3. Practical application and pre-study: establish successful use-cases on LCA

Ultimately the project strengthening and creates an important basis for the environmentally sustainable management of Sri Lanka's private sector and thus ensures the local anchoring of capacities for sustainable production and circular economy in the long term.



Beyond the Boundary

featuring

Eng. Ananda Namal

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Member of the director board, NCPCSL

This time of Beyond the Boundary we had a chance to talk with a fascinating member of our board of directors, Eng. Ananda Namal.

Questions regarding the energy sector in the country were imposed on our interviewee and we shall see what are his take on them in the "Beyond the Boundary" segment.

Mr. Namal, the term "Energy Management" has been introduced to the Sri Lankan industries for almost 40 years. According to you, how far along have we come since then? How do you rate the progress?

In the 30 year period of my career as an accomplished engineer, what I have noticed in the industry nowadays is that they all have taken some form of action towards managing their energy efficiently. In the early 80s and 90s, the industry was not much interested and concerned about efficient energy management. This is due to the fact that many improvements were noted and recommendations given were also very simple in terms of difficulty in implementation. In time, I noted many individuals in the industry become more aware of the energy management concept and started to implement the most obvious changes to their respective workplaces. These workplaces which implemented energy management improvements reaped many benefits. Noticing these benefits, many started to follow suit. Currently, the situation of the "Energy Management" stands where recommendations and opportunities can be proposed to industries only by diving deep into their processes, which can be a very challenging task for an energy auditor.

What are the challenges do the industries have to face when adopting best practices?

One issue I have noticed is that the processes in many industries have undergone many improvements. They have been through many efforts to implement best practices. Therefore the current industries have to dive deep into their processes to find best practices and the resulting implementations are very costly. With the high cost, the industries are reluctant to go ahead with those implementations. Rather they require visual confirmation on how effective they are. They want demonstration projects to convince them that these implementations will be beneficial for them. For example, the

air conditioning systems found in the industries can be taken. The current air conditioning system had been through all the possible changes to support the energy management standard requirements. The only remaining change would be to install a new system which has better efficiency. Installation of a new system will be a huge investment for the said industry and the top management would require a guaranteed return from the new installation.

Another challenge that I have come across is the lack of professional persons who can support and implement new technologies in the industry. With technology developing at a rapid pace, the large-scale industries in other countries install and implement new technologies in their workplace. These new technologies help them to increase productivity and to increase their profits. But to support the implementation of new technologies in the workplace, it is also important that there are enough professionals who have the knowledge of the new technologies. With a lack of professionals, the industry would not want to take a risk in investing big and not have the proper understanding of how to install it and use it.

Due to the current pandemic, industries are facing large energy costs during low production capacities. How do you recommend industries that can overcome them?

This is a very serious issue the current industries are facing as the production volume in almost all the industries have reduced significantly. But although the production have been reduced significantly, the energy overhead is increased. Therefore, the industries are facing an economic crisis. But what I would suggest in each of these industries is to use this as an opportunity to learn about the processes in their relevant workplace, and to improve the workplace. In normal circumstances, this cannot be done as the machines in the factories are not shut down but let run continuously. Therefore many improvements are halted. Now is the perfect time to put the processes of the workplace into the microscope and fine-tune it. Improving the energy efficiency of the workplace would help to reduce the energy cost as well. This can be done by arranging an energy audit which will help to receive some third-party improvements to the workplace. National Cleaner Production Centre can help with this cause as they provide this service with a small crew of experienced engineers to conduct the audit.

What kind of challenges Energy Saving Companies (ESCos) are facing? What actions can ESCos take to achieve their financial targets during this Covid-19 pandemic and also ensure the satisfaction of the customers is still intact?

The real issue here is the real concept of ESCos is not fully implemented in our country. The reason for my above statement is that although there are many companies that identify themselves as ESCos, what they do is either provide only the service to a client or import some devices or equipments and install it to the clients' place of interest. A proper ESCos model is that the company develops an energy-saving initiative for a client and the client and the service providing ESCo come to a mutual agreement on sharing the profits gained through the energy saving initiative implemented to the client. This model is not followed in our country because the monitoring and the verification system placed by the client must be proper or it will be a task next to impossible to quantify and verify the savings. This is one of the challenges the ESCos are facing to function as

a proper ESCos body.

Due to the current ongoing pandemic, industries are reluctant to get third-party professionals into the workplace which poses a threat to the workers in the workplace. This is another issue faced by the ESCos.

ESCos should target industries situated in low-risk areas. As many of the industries are situated in rural areas, this would not hinder the ESCos to continue their function and provide the necessary service to the clients. ESCos must make sure that the employees of ESCos are taking the necessary precautions so that they would also not be harmed by the ongoing spread of the Covid-19 virus.

His Excellency president Gotabaya Rajapaksa directed that the plans should be devised to meet 70% of the country's electricity demand using renewable energy sources by the year 2030. How realistic is this target as we have only 9 more years to attain this target?

According to my view, as there are only 9 more years left, I do not think this would be a target that we would be able to achieve. I know that many of our population will prefer this target to be met, but they do not comprehend how difficult this target is in reality. In the current scenario, the renewable energy sources in the country are hydro, solar, biomass, and wind. Hydro plants are now close to exhausted. In terms of Biomass, the issue is that it is not a profitable business unless it is a by-product of a set of processes. Wind and solar are currently on the rise but still relatively low when compared to other energy sources and have many restrictions as well. Therefore, I personally believe it is not possible to achieve this target by the year 2030. Maybe it may be a possibility by the year 2050 if we keep on the path of installing and introducing new renewable energy sources.

What are the most potent sources and your recommended renewable energy sources? How financially viable are they to a developing country like ours?

The most important thing that you have to consider when you move onto renewable energy source is that it has to be a proven technology. Although biomass is a proven technology, one has to think about the prospects of biomass as well. Bare land is rare in our country and the land value is also very high. So it may not be the solution. Solar and wind sources have the potential in our country but they are not reliable. Although the technology regarding these sources is improving each day, the present grid in our country is not matured enough to absorb all the generated energy. Therefore, it is best to have this target to be met by 2050 because we have enough time to develop our present grid and the technology in the coming years will also be developed and will be a proven technology.

The first waste to energy power plant began its operation this year. Liquefied Natural Gas (LNG) plant plan is also approved. How is the potential for expansions for plants of this nature in your opinion?

In my personal view, I do not support the waste to energy power plant recently set up in our country and let me tell you why. The reason for my stance is that the implementers of the waste to energy power plant would obviously want to gain financial profits from the power plant. Financial profits can only be

Waste to Energy Power Plant, Kerawalapitiya

gained by the power plant if the plant operates at the highest level and for this reason, it would need a huge amount of waste. This would pave the way for the implementers of the power plant to encourage the generation of waste in our country.

Another point to be noted here is that the waste collected and used to generate energy must be waste that is combustible. But a large amount of waste in our country belongs to the category of non-combustible waste and therefore, they would produce a large number of ashes through combustion. This would be a serious issue and it will have to be addressed as well. Due to these reasons, my professional view is that waste reduction must be promoted at all costs.

In terms of LNG, the government has taken initiatives to implement LNG power plants to increase the power generation capacity of the island. It is environmentally friendly compared to other fossil fuel-based plants. In my view, I think LNG has a bright prospect in our country to support energy generation.

Apparently, there is an acute shortage of competent technical personnel who can provide engineering solutions for environmental non-compliance issues such as air emissions. As a fellow engineer, what are your suggestions to build up national capacity on such engineering excellence?

What you have mentioned here is a very serious issue the current industry is facing. According to my knowledge, there are only a handful of professionals who are capable of tackling issues regarding noise and air emissions in the country. This is because the capacity building on these areas is not focused properly in the university education curriculum. A basic introduction is given in these areas but not a thorough study. These areas are covered by science graduates but then again, the engineering graduates are not capable of handling issues regarding air and noise emissions. Thorough capacity-building programs must be conducted in order to increase the number of professionals in these areas in the near future.

What words of wisdom would you give to the aspiring future energy auditors and environmental consultants regarding personal traits, skills, and other capacities that they should focus developing on, so that they will be able to fulfill the industry requirements in a healthier way?

Energy Auditors have to all-rounders. Many energy auditors I have come across are either good in the mechanical side of auditing or excelling in the electrical side of auditing. A true energy auditor must be excelling in electrical, thermal, and even the processes as well. To ensure the auditors are equipped with thorough knowledge, they must be subjected to intensive capacity-building programs. There is a shortage of good calibre engineering environmental consultants as well. Proper capacity-building programs would be the key to address the shortage the industry is facing currently.

The official launch of PROMISE project

The PROMISE (Prevention of Marine Litter in the Lakshadweep Sea) project was officially launched on 26th January 2021 by the Minister of Environment, Dr. Hussain Rasheed Hassan at The Maldives National University (MNU).

A beach cleanup event was organized for the project launch by MNU in partnership with Parley. The event was held at Hulhumale on the 25th of January with the First Lady of Maldives, Fazna Ahmed also participating and offering her support to the project.

The other project partners, STENUM Asia, TERI, and Adelphi were also physically participated in the project event, while NCPC Sri Lanka joined the event virtually. The project is funded by EU SWITCH-Asia Programme and aims to promote source-to-sea solutions to reduce marine littering in tourism clusters along the Lakshadweep shorelines of India, Sri Lanka, and Maldives.

Successful Completion of Consultant Development Training Programme on Environmental Management Systems (EMS) -2021

Annual training for 'Consultant Development Training Programme on Environmental Management System (EMS)" was successfully taken place from the 22nd of February to the 25th of February 2021. The training programme was based on ISO 14001:2015 and ISO 14001:2016 standards. The on-site assessment for this training programme was held at H Embellishment, (Pvt) Ltd.

Successful Completion of Consultant Development Training Programme on Water Auditing and Water Footprint Assessment -2021

Annual training for 'Consultant Development Training Programme on Water Auditing and Water Footprint Assessment (based on ISO 14046:2014 Water footprint guidelines)" was successfully taken place from the 9th to the 11th February 2021. Eighteen participants from industrial, services, public and academic sectors were trained as Consultants on Water Auditing and Water Footprints Assessments.

Successful Completion of the 5th batch - Certificate level training course on "Corporate Environmental Sustainability through Greening the Industries"

The 5th batch of Certificate level training course on "Corporate Environmental Sustainability through Greening the Industries" commenced on the 18th of December 2020. The training programme included 10 sessions which were conducted at Hotel Janaki in the following weeks.

Successful Completion of Consultant Development Training Programme on Energy Management Systems based on ISO 50001:2018 Standard -2021

Annual training for 'Consultant Development Training Programme on Energy Management Systems based on ISO 50001:2018 Standard" was successfully taken place from the 29th of March to the 1st of April 2021. Twenty-Six participants from industrial, services, public and academic sectors were trained as Consultants on Energy Management Systems

Upcoming consultant development training programs for the year 2021

2nd quarter

Capacity Building on Conducting Life Cycle Assessment based on LCA Software Tools (ISO 14040 & 14044 Standards, Simapro & Umberto Software)	03 days, 04th – 06th May	38,500/=	Ms. Maheshi Wickramasinghe RECP Technologist Contact: 076 3103011 / maheshi@ncpcsrilanka.org
Consultant Development in Resource Efficiency & Cleaner Production according to UNIDO Methodology (Under ISO/IEC 17024:2012 Person Certification Scheme)	03 days, 08th – 10th June	32,500/=	Ms. Nikeshala Marasinghe RECP Technologist Contact: 0763102909 / nikeshala@ncpcsrilanka.org

3rd quarter

Training Programme on Energy Management for Energy Managers (Under the Accreditation of Sri Lanka Sustainable Energy Authority)	03 days, 13th – 15th July	28,500/=	Eng. Jonathan Nithiananthan RECP Engineer Contact: 074 0239337 / jonancpc@gmail.com
Consultant Development in Sound Chemicals Management & Safety based on IAMC Toolkits (Under ISO/IEC 17024:2012 Person Certification Scheme)	03 days, 17th – 19th August	27,500/=	Eng. Lakmini Edirisinghe Senior RECP Expert Contact: 0763162452 / lakmini@ncpcsrilanka.org
Certificate Course on Corporate Environmental Sustainability through Greening the Industries (Under ISO/IEC 17024:2012 Person Certification Scheme)	10 Fridays, From 24th September	58,500/=	Ms. Iresha Gurusinghe Senior RECP Expert Contact: 0763162448 / iresha@ncpcsrilanka.org

4th quarter

International Conference on Second Sri Lankan Resource Efficiency & Circular Economy	01 day in October		Eng. Lakmini Edirisinghe Senior RECP Expert Contact: 0763162452 / lakmini@ncpcsrilanka.org
Consultant Development in Quantification of Carbon Footprint based on ISO 14064-1:2018,14064-2:2019 & 14067:2018 Standards (Under ISO/IEC 17024:2012 Person Certification Scheme)	03 days, 23rd – 25th November	24,500/=	Ms. Harshini Rananjali RECP Technologist Contact: 0763162445 / harshini@ncpcsrilanka.org
Training Programme on Principals and Applications of Green Chemistry	02 days, 20th & 21st December	17,500/=	Eng. Lakmini Edirisinghe Senior RECP Expert Contact: 0763162452 / lakmini@ncpcsrilanka.org

Pivithuru Gee Sara - 2020

National Cleaner Production Centre, Sri Lanka had its annual cultural sing along event, "Pivithuru Gee Sara - 2020" on the 25th of February at Raja Bojun, Colombo - 03. The event was a huge success as all the employees of NCPCSL along with their spouses and children participated in the event and showcased their talents in the field of music. As social interactions had been prohibited for a considerable amount of time due to the Covid-19 pandemic, this event was a breath of fresh air for the NCPCSL team and it helped to increase their battery levels as well.

National Cleaner Production Centre, Sri Lanka

Overview

National Cleaner Production Centre, Sri Lanka (NCPCSL) was set up by UNIDO in 2002 as a project under the Ministry of Industry and Commerce. NCOCSL, which was funded by Royal Norwegian Government, works very closely with the chambers, to provide the technical support to the industry and business enterprises to prevent pollution and conserve resources in by the application of Cleaner Production (CP) and other proactive environmental management tools.

The Centre was set up under the UNIDO/UNEP global cleaner production programme as a member of the network of National Cleaner Production Centres across the world. The purpose of the Centre is to support various industries and economic sectors in the country to improve their resource productivity.

NCPCSL in its mission during last 18 years has conducted Cleaner Production assessments in more than 1000 industrial organizations.

Services

Training and Capacity Building

Resource Efficient Cleaner Production Assessments

System Development

Energy Management

Wastewater Treatment Facilities

GHG Assertion

Environmental Impact Assessment (EIA) and Initial Environmental Assessments

Waste Audits

Water Audits

Water Footprint

Carbon Footprint Verification

Persons Certification

Board of Directors

NCPCSL's director board is a representation of prominent government entities and chambers working with industry and environment.

Ministry of Industries

Ministry of Environment

Ceylon National Chamber of Industries

National Chamber of Exporters, Sri Lanka

Sri Lanka Sustainable Energy Authority

National Engineering Research and Development Centre

National University System

National Cleaner Production Centre, Sri Lanka

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