



## Shaping Career within the Environmental Sector

The Sustainable Development Goals can be described as a universal call to eradicate poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030.

Most of the industrial infrastructure Facilities are already existed in around the world, "the fossil"-fuelled power stations, the factories and inefficient transport and buildings are already contributing to the current high level of emissions and will continue to do so for decades to come. Meanwhile, the growth of the global population places intense pressure on the demand for scarce resources.

### Where job opportunities are increasing?

- 01.Renewable energy,
- 02.Energy engineering,
- 03.Energy management, carbon and climate change, water engineering and waste management.

### Water Engineering Job Opportunities

Industrial and domestic water supply is coming under increasing pressure from demographic and climatic changes. Water Engineering activities which are playing a key role in delivering safe, reliable water supplies to; households, industry and agriculture and in safeguarding the quality of water in rivers, lakes, aquifers and around coastal areas. Higher educated, skilled and experienced water engineering professionals are required, more than ever, to operate and manage vital water and wastewater treatment services. The demand for such professionals is already being high and will increase over coming years.



### Example:

"Flood Modeling and Hydrologist Career opportunities are available. In particular, leading technical organizations are rapidly recruiting water engineers who have experience within water and waste water treatment projects, with salaries of up to £50,000, there are excellent prospects for such specialist candidates."

(Source: Allen & York (2012/May/15), Career Trends in Energy and the Environment

Available at:

[www.waterpowermagazine.com](http://www.waterpowermagazine.com))



## Areas where Green friendly job opportunities are created



- \*Environmental goods and services, including water and waste management
- \*Environmental Engineering
- \*Renewable Energy
- \* Construction and Building services
- \* Manufacturing
- \* Agriculture and Forestry
- \* Transportation services
- \* Tourism
- \* Extractive Industries

(Source: Skills for a Greener Future: A Global View. (2019), ILO (pp.114))

### “Environment” related (Newly) Emerging Jobs

- |                              |                         |                            |
|------------------------------|-------------------------|----------------------------|
| <b>Agricultural Engineer</b> | <b>Entomologist</b>     | <b>Molecular Biologist</b> |
| <b>Archaeologist</b>         | <b>Geographer</b>       | <b>Oceanographer</b>       |
| <b>Bioinformatics</b>        | <b>Hydrologist</b>      | <b>Paleontologist</b>      |
| <b>Climatologist</b>         | <b>Marine Biologist</b> | <b>Seismologist</b>        |
| <b>Ecologist</b>             | <b>Meteorologist</b>    | <b>Wildlife Biologist</b>  |
|                              | <b>Microbiologist</b>   | <b>Zoologist</b>           |

### Strong Green jobs potential in Sri Lanka

- \*\*Agriculture, Forestry and Fishing
- \*\*Mining and Quarrying
- \*\*Electricity, Gas, Steam and Air conditioning supply
- \*\*Water supply, Sewerage, Waste management and Remediation activities

(Source: ASIA AND THE PACIFIC EMPLOYMENT AND ENVIRONMENTAL SUSTAINABILITY FACT SHEETS (2019)(pp.7).)



There are enormous opportunities for efficiency improvements in every sector of the economy, whether it is buildings, transportation, industry, or energy supply. According to the International Energy Agency (2017), energy efficiency technologies will contribute substantially towards achieving carbon neutrality by 2060.

( Source: Available at:

<http://www.energy.gov.lk/en/energy-management/what-we-do>)

## Energy from Waste and Waste Engineering

Improving waste management operations water minimization and processes are all key to these roles and this is an area in which new technologies within Anaerobic Digestion and Biogas production are offering new and challenging job prospects within the waste industry.

## Waste Management

The waste management sector is another to receive an injection of job opportunities based on number of trends, including the increase in population in any given area and secondly, our consumption patterns – which are controlled by the evolution of Gross Domestic Product per Capita (GDP/c). Obviously, both the increase of the population and the remarkable growth of global GDP/c will drive an increase in waste volumes – using macroeconomic data from the 30 Organizations for Economic Cooperation and Development (OECD) it has been estimated that a 1% increase in national income creates a 0.69% increase in solid waste amount. Moreover, our changing culture will mean that it is expected the demand for agricultural goods will rise by 70% and the demand for meat will double by 2050. Besides the serious issues related to food production and sustainability, these changes will alter the waste composition in a large part of the world.

### Demand for sustainable products and services

Consumer awareness is driving a demand for more sustainable products and services. The strongest potential for sustainability-led opportunities lies in agriculture, renewable energy, waste management and tourism.

(Source: Future of work in Sri Lanka: Shaping technology transitions for a brighter future, (ILO,2019),(pp.09).)

Sustainability, specifically the discipline of renewable energy is a sharply rising trend which creates more sustainable job opportunities. The increase in world population points towards a greater stress on our resources and the vital need to address sustainable energy development, water management and waste infrastructures for our future generations; all of which require rare, technically skilled and specialist professionals.



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