

Circular Economy - Energy Conservation



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Is your case study linked to an 'ugly truth' or a 'key success factor'?

This 'Circular Economy' case study 'Conversion of waste steam to usable energy' is linked to a 'key success factor'.

What does the case study help tackle?

The aim is to convert **waste to wealth** and creating value to the organization by contributing to the global sustainability challenges. This initiative helped in energy conservation and reduction of Scope 1& 2 GHG emissions.

What was the outcome and how did you measure it?

The implementation of the case study delivered remarkable results to both the parties ecologically and economically.

Process by-product (steam) of neighbouring Industry is being used by us and we monitor the progress by collecting quantitative data and measure the outcome to know our achievements and opportunities for improvements. The results are significant and helped organization to achieve:

- 50% of steam requirement of the Unit, which avoided the coal use and water use for steam generation.
- Reducing the Global Warming by avoiding **42,594 MT of steam release per annum** into the atmosphere and utilized which in turn aided to conserve **43,872 KL of water per annum**.
- **Scope-2 Emission Reduction: Conserved 5,96,320 kWh electricity** which requires to operate the boiler.

Who was involved (departments/roles)? How did you justify it to the business?

The ESG initiatives are adopted and executed in a systematic approach at Laurus Labs. The unwavering support and commitment of top management towards sustainability initiatives and goals assisted in execution of this initiative. Decentralized execution at individual sites by the respective Site Leadership Team including Site Operations Head, Heads of Engineering, EHS, & Supply Chain etc. played an indispensable role for the seamless implementation of this initiative. This benefits in **Scope-1 Emission Reduction: avoiding the coal consumption up to 11,075 MT per annum** deriving a benefit of **15,947 MT GHG emissions reduction**.

What were the key success factors?

The key success factors are...

- Organization's proactive approach in adopting and implementing the eco-friendly initiatives from its inception.
- Laurus Labs bagged many prestigious Awards from Government and other prestigious Organizations for its best efforts made in Environment and Sustainability.
- Collaborated with neighbouring industry to achieve "Emissions to Economy" and now made our facility as Boiler free operational Unit.
- Laurus Labs had given the commitment to SBTi in December 2023 and setting-up targets for validation exhibiting strong commitment to sustainable world.

What are your watch-outs for others attempting this?

- Examine the current operations and have a clear vision about sustainability initiatives and goals.
- Conduct a SWOT analysis both internal and external to identify the opportunities.
- Invest in empowering and developing technical skills & all round development of the personnel.
- Leverage industry networks by joining peer groups e.g. SPP, PSCI, TfS etc. and emissions reduction initiatives such as access to 'Energize' programs. Design conversations around driving efficiency and optimizing operations while managing financial implications and sustainability ambitions.

How would you recommend those with less resources attempt this?

Primarily, Create awareness among the team and convince management to recognize the importance of ESG initiatives globally and integrating them into systems. Focus on opportunities which can be adopted easily, Since emissions reduction is not a one time activity but a journey that the organization has to go through.

Who were the main drivers (the people that were boots on the ground), and the main leadership sponsor?

The main drivers includes, the continuous support of the top & senior management and collective efforts of members from EHSS, Engineering, Supply Chain etc. under the leadership of Operations head.

