

## Make Production More Green or Savings will be Lean!

**A manufacturing company wastes millions of SEK annually due to unnecessary practices. How is the company supposed to minimize these costs and become the most coveted company on the market?**

Our study analyzed waste on a production line to help a company become more green. We found that the most waste comes from recurring disturbances. These disturbances cover unnecessary downtime, energy consumption, and insufficient planning ... to name a few. Operators are left waiting for the next task to come along, and as the saying goes; time is money! The company spends 13 000 SEK extra each batch due to waste, which leads to millions of SEK being wasted each year. To avoid this, simple measurements can be implemented in the system, which will lead the company to where the grass is greener on the other side. Not only will this save them money, but it is also good for the environment! By limiting the material littering, our planet can flourish.

We can think of production as a recipe. Based on our study, the key ingredients are simple. To promote more sustainable production, accurate documentation of the production in the form of protocols makes planning more efficient and leaves room for optimization. Tracking how and when materials are discarded during production is another ingredient. This helps with exposing what practices need to be changed to promote green work habits. The last ingredient is measuring the energy consumption. Some scenarios in our study indicated longer production time, and it could be beneficial to establish how much this affects energy consumption. To see any issues in production, it would be well-fitting to measure the consumption of every production.

Having these ingredients as your *mise en place*, you can cook up the recipe for optimal equipment efficiency and be full and satisfied, knowing that the company is in good and green hands.

The results were found using lean thinking when observing the production facility, as well as through deep and informative discussions with employees. Consulting with the managers of the company, they believe in implementing these lean methods into their production system. In the future, we predict that these improvements can save the company millions in production costs.

We hope this stimulated your interest to read our whole study. Perhaps it motivates you to adopt a leaner mindset, or perhaps it serves as a lesson for your future business. Every company should strive to leave an environmentally sustainable footprint, and by implementing our recommendations, a company may be able to do just that.

*Déspina Karida & Sanna Treptow, 2023*