

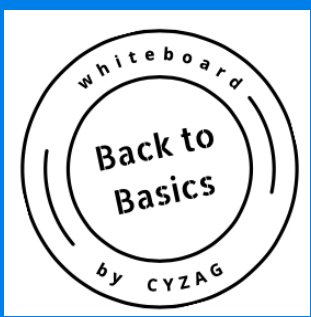


whiteboard
by CYZAG



**How to deliver
sustainability from the
shopfloor up?**

**Let's get back to basics
of Sustainability**



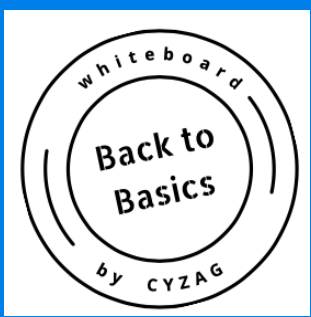
The Need

The chemical sector is:

- A four trillion-dollar global business, employing more than 20 million people (directly + indirectly).
- The largest industrial energy consumer.
- The third largest industry subsector in terms of direct CO₂ emissions.
- Accounts for approximately 11% of the global primary demand for oil and 8% of natural gas.

The numbers prove what we already know: all contributions to improving sustainability in the industry are needed.

Let's get back to basics and discuss sustainability concepts and how the shopfloor can contribute.



1. Sustainability Pillars

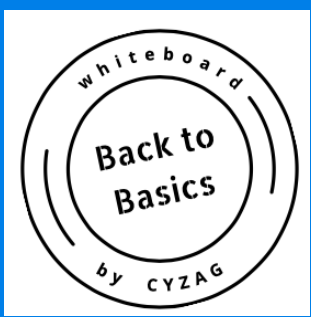
Sustainability is often interpreted as just environmental sustainability. But it is much more than that.

The three pillars of sustainability were first mentioned in the Brundtland report in 1987.

Those are:

- 1- The environment,
- 2- Society, and
- 3- The economy.

Sustainable development is built on top of those three pillars because it can be achieved only when environmental protection, social equity, and economic profitability coexist.



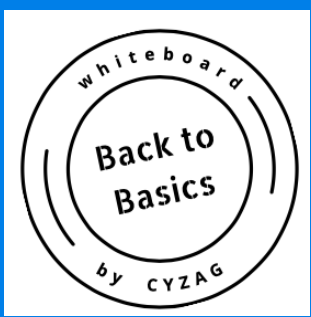
2. Sustainability & Chemical Industry

The scale and diversity of the chemical industry provide it with widespread opportunities to contribute to the realisation of sustainable development goals (SDGs) by 2030.

Breakthrough innovations, new materials and solutions to a circular economy are needed.

But additional solutions related to the plant operations and the shopfloor are also crucial:

- Preventing waste,
- Decreasing the use of feedstocks,
- Decreasing carbon footprint,
- Increasing energy efficiency,
- Minimising accident potential.

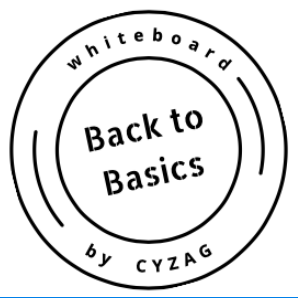


3. What to do: Enable your people

A growing number of organisations are integrating sustainability into their business strategy—realising they can do well by doing good.

In addition to the contribution to the planet, focusing on sustainability can offer an alternative to reduce operational costs (OPEX). This is because sustainable development connects directly with efficiency.

Enabling people on the shopfloor is powerful since waste awareness is created and where processes can be improved.



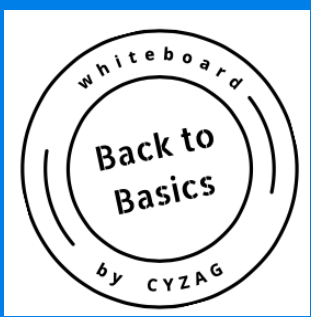
4. How to do: using digitalisation

By digitising your shopfloor, you can:

1- Automate Processes: the first way to reduce operational costs. By automating a process, you can reduce the amount of time and money spent on manual tasks and the reduction of errors.

2- Streamlining Processes: the most effective way to reduce operational costs. It eliminates unnecessary steps, and improves communication and coordination, creating a single source of truth.

3- Eliminate waste/optimize consumption: identify improvement opportunities such as raw material, energy, water, emissions, etc.



5. A practical example

In this control room, the need is to reduce feedstock consumption, its cost and its supply chain CO2 emissions.

They started by :

- Configuring the boards, trends and drill-downs their way, meeting their specific needs.
- Enabling quick identification of the losses and the possibility to play around with numerous process parameters, to generate insights.

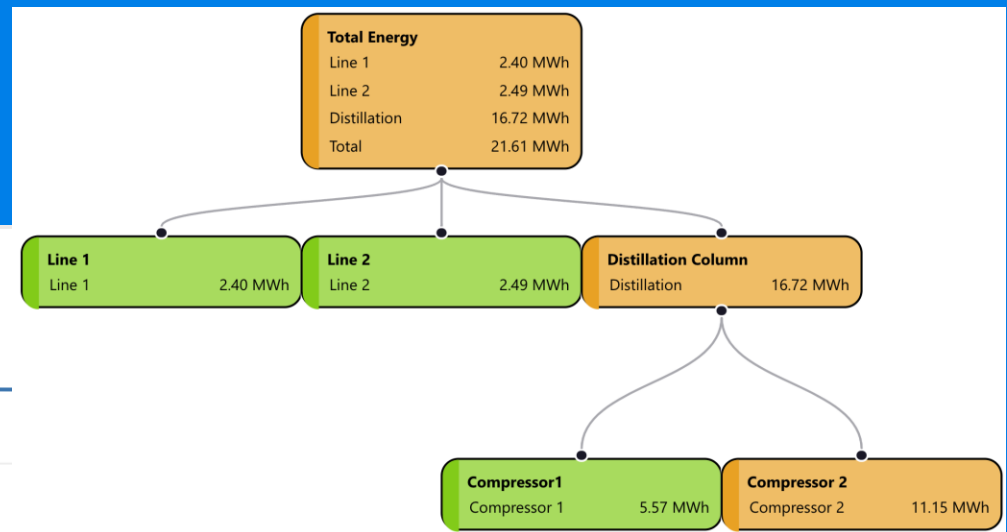
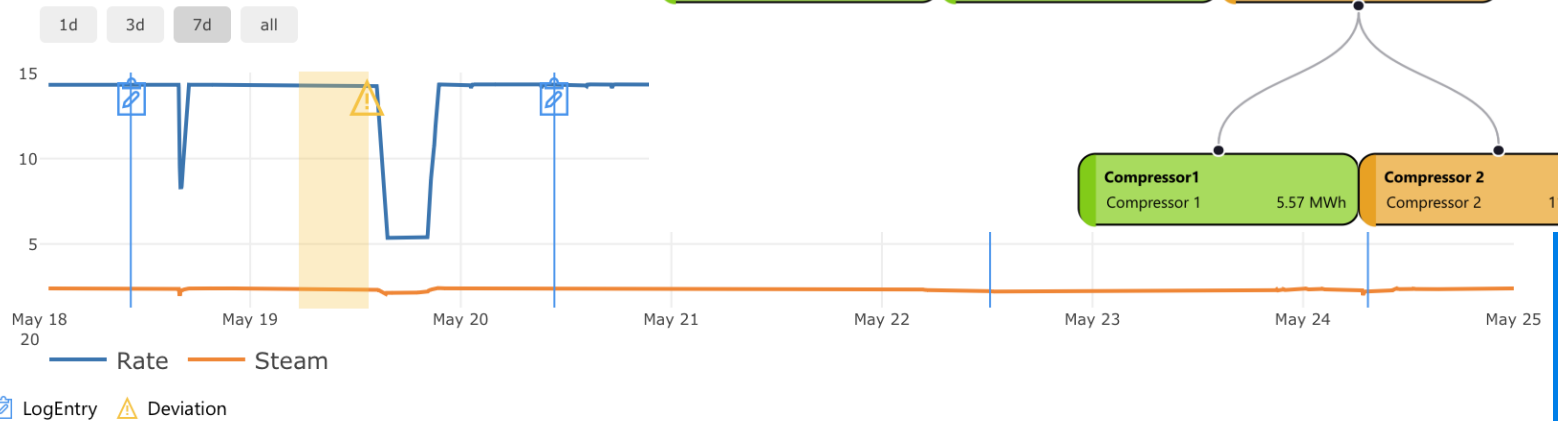
Looking at different consumptions, they realised steam feed to the process was almost stable while the production rate was changing.

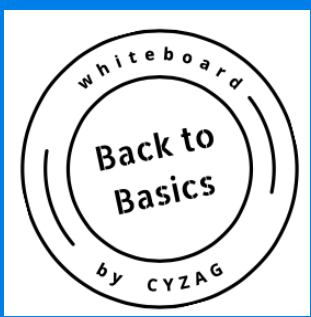


5. A practical example

They are now collecting data to perform root cause problem-solving (RCPS) and to identify solutions to improve steam efficiency.

Visual Log Chart





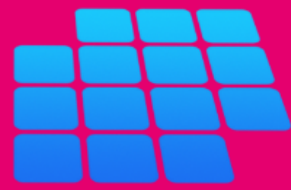
6. Scale

Tap into the collective knowledge and experience of your workforce through standardisation and horizontal deployment of use cases.

This fosters collaboration and dismantles silos, leading to increased collaboration and new ideas and solutions.

Digitalisation is the most effective way to engage your people to impact sustainability.

Every shift. Every day.



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Why: Sustainability
What: Enabling Your People
How: Digitalisation

Book a demo with us to see how to enable your people to build a more sustainable business using digitalisation.



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