

Finding the right formula for the challenges ahead

As the UK begins to emerge from the pandemic, looking beyond 2020 means focussing budgets and resources on a new set of challenges. With the industry facing the need to digitalise and decarbonise, the mass electrification of the sector requires tried and tested thinking around electrical infrastructure resilience to meet this new challenge head-on.

According to a recent report from the CIA, the chemical sector has reduced its direct emissions by 80% over the last 30 years. One of the biggest tools at its disposal will be the mass electrification of the industry. The sector relies not only on wholesale electricity becoming more competitive, but also new ways to reduce and produce its energy on-site. This move to electrification however also poses new risks for organisations who may be adding unforeseen electrical stress onto their facility as the move away from gas continues.

Siemens has a very strong presence within the industry. Its customers range from major corporations like BASF, Dow, DuPont, Ineos and Akzo Nobel but they also support the many thriving small and medium enterprises who also make a huge contribution to the sector.

“The concept of electrical infrastructure resilience is nothing new for the chemical sector; the industry has had a good level of awareness for decades, simply because of its energy intensive nature,” said Siemens’ Head of Chemical Industry, Ian Elsby.

Siemens’ involvement in this space hinges on three key areas in the drive for decarbonisation and mass electrification of the industry: reduce, produce and procure. Ian said: “For us, reduce refers to being as energy smart and efficient as you possibly can. Our thinking is that if it can be measured, it can be improved. Second, we have produce, which relates to on-site generation. While local generation may not cover the entire site’s needs, it may be enough to be stored and used to offset periods of heavy use at peak time. With the grid decarbonising at such a rate, the third area is procure, and for a lot of organisations that has been the easy part so far.”

Ian added: “Finding ways to help all industry with energy pricing over the coming years while meeting the UK’s carbon neutral targets is obviously key. But being as energy smart and efficient as you possibly can be at your plant can and will make a major contribution to the bottom line. With additional, visible data they can identify individual production processes which could be more energy efficient. Even a relatively small company which is using a process like electrolysis might have an annual electricity bill that runs into the many tens of thousands.”

Measure for success

For many global customers in this sector Siemens is also

there to deliver high-level, strategic advice in terms of their future infrastructure and what are the most appropriate energy sources. The first step for organisations is understanding how much of their site contains legacy equipment and quickly dating electrical infrastructure. For a major company, it might own older ‘legacy’ sites within a portfolio which might be four decades into service and they will not be particularly energy efficient.

This doesn’t just apply to multi-site owners. Siemens also works with smaller SMEs creating bespoke solutions for their facility. When you work with Siemens you get the advantage of liaising with the OEM who understands the entire energy picture rather than simply an installation and service supplier.

Ian concluded: “When you work with Siemens you get the advantage of speaking with an OEM who understands the big picture; everything from industrial automation and manufacturing processes paired with 170 years’ of electrical infrastructure expertise.”

Find the answers to your energy resilience questions or book a site visit to discuss your challenges with our technical team here: www.siemens.co.uk/energy-resilience



With more than 20 years’ experience gained within the process sector & automation business, Ian holds a wealth of chemical industry-specific knowledge. As Head of Chemicals, Siemens UK & Ireland, Ian’s current role sees him responsible for liaising directly with the Global Chemical Sector HQ advising on the industry challenges faced by UK

manufacturers, OEMs and engineering businesses to ensure Siemens develops value-based solutions and technologies for its clients.

Ian is engaged within several UK chemical industry networks, offering insights around the following themes: The Internet of Things, automation, digitisation, Industry 4.0, productivity, and Connected Manufacturing.



Image Source: Siemens