

# Intellectual capital





RAIN continues to harness its knowledge, expertise, innovation capabilities, and proprietary technologies and processes to maintain its distinctive standing in the industries it serves. Throughout the year, we have diligently utilised these strengths to spearhead innovative initiatives aimed at fostering a cleaner and more sustainable future.

### Focus areas

- ▶ Product development
- ▶ Digital transformation

### Stakeholders impacted

- ▶ Customers
- ▶ Employees

### UN SDGs impacted



## Product development

In 2023, we achieved significant milestones in product development, marking exciting progress across our diverse portfolio. Notably, two leading global aluminium groups began industrial-scale tests of our proprietary calcined anhydrous carbon pellets (ACP), showcasing the growing recognition of our innovative solutions. The following are some key developments made in 2023 across the three segment:

### Carbon segment

The introduction of new high-density shaft CPC products gained widespread market acceptance throughout the year, serving as a strong indicator of positive prospects. We also enhanced our operational effectiveness through investment in digitalisation and energy efficiency initiatives.

### Advanced Materials segment

We made significant strides by introducing multiple new products characterised by cleaner and greener attributes. These innovations featured higher purity, lower carbon footprints and incorporated bio-based raw materials, aligning with our commitment to environmentally conscious practices.

### Cement segment

We surpassed previous records for clinker production levels at our cement plants. A record-breaking amount of green electricity was generated from our waste heat and solar power production sites, demonstrating a robust commitment to sustainability.

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### Digital transformation in operations: Energy monitoring systems

Four USA Carbon segment calcination sites completed the installation of online energy monitoring systems, providing real-time data on energy usage and breakdowns. This digitalisation initiative enables us to quantify the impact of energy reduction projects, with an anticipated total energy use reduction of over 10% in the next three years.

### Process digitalisation

Our production data-mining software, Trendminer, underwent upgrades to enhance user-friendliness. This improvement, combined with the upgrading of our iHistorian database, facilitated real-time monitoring of kiln CPC yields, CO<sub>2</sub> emissions concentrations and flow rates.

Additionally, we initiated a project to explore the use of artificial intelligence (AI) to enhance performance parameters at one USA Carbon segment plant as part of an AI pilot programme.

### Operational efficiency enhancements

Digitalisation efforts extended to some of our Carbon segment's production operation and maintenance areas. An online continuous monitoring system at the Lake Charles plant replaced manual quarterly visits to monitor turbine generator unit conditions, enabling 24/7 remote monitoring.

Similar advancements were made at Gramercy and Norco plants, transitioning from bi-monthly physical monitoring to online monitoring using cloud-based technology.

### Digital transformation in Human Resources (HR): SAP-SuccessFactors implementation

We launched the SAP-SuccessFactors Performance Evaluation module and expanded the Learning Management System module, facilitating global employee performance insights and enhancing talent development strategies.

In 2024, we plan to implement SAP-SuccessFactors systems further to enhance efficiency and decision-making capabilities. These initiatives align with our commitment to innovation and sustainability, driving continuous improvement across all facets of our operations.

### Digital transformation in safety: EHS Insights implementation

We implemented EHS Insights, a digital hazard tracking and document retention system, starting at US sites in 2023. This system facilitates hazard identification, review and scheduling of corrective actions, enhancing safety protocols. We will roll out EHS Insights globally in 2024, enabling real-time tracking of hazard metrics and progress on corrective actions.

