

OUR INNOVATIONS

Innovation at Cegelec CEM



Innovation means transforming ideas into value.

This involves everyone, which is why the people who work at Cegelec CEM are **open-minded**, striving to **reinvent their roles each day** while remaining competitive and listening to their customers.

This **collective intelligence** within an agile organisation accelerates the transformation of our business and helps us **increase the value of our services**.

Innovation stimulates our creativity, expands our skills and lets us push boundaries.

This mindset is encouraged by the VINCI Energies Innovation Department, which provides support for Group companies through its specialists based at a single forum for exchange – La Factory. This incubator for talent and ideas makes it possible to maintain close ties to the network of startups selected by VINCI Energies. In addition, the VINCI Group supports intrapreneurship and innovation across all Group business lines through its **Leonard** programme.

Our innovation is customer-oriented

We constantly strive for a win-win partnership in all aspects of our business:

- ✓ **Advice, expertise** and support, with the desire to overcome challenges
- ✓ **Agility and creativity** – finding the solution that no one else has thought of is in our DNA!
- ✓ **Mature, robust solutions**, as we are solution integrators as well as an engineering company that builds
- ✓ **Facilitating immersive visits and collaborative reviews**, with a vision of the project throughout its life stages to anticipate and effectively manage all data and requirements
- ✓ **Creation of digital twins** with advanced simulation and qualification using models to achieve the required performance and compliance

- ✓ **Facilitating customer ownership of our designs** and creations to incorporate operating and maintenance constraints
- ✓ Allowing customers to **communicate, monitor, measure and share** progress on the subsystem entrusted to us, within the overall system represented by their project



DIGITAL COMMUNICATION WITHIN OUR BUSINESS

Our business is undergoing a profound transformation with a view to developing a collaborative working environment, from design to operation.

Augmented, virtual reality and mixed reality technologies help keep our employees connected while enabling them to be mobile.

- ✓ **Virtual reality:** design reviews, training, safety aspects, 4D presentation of operations, interface management, and more
Want to know more? [Download the brochure](#)
- ✓ **SILARA application:** application for managing ambient dose rates
- ✓ **Our connected operators:** use of headsets for process inspections and validation
- ✓ **3D scanning:** tool for modelling the operating environment, integrated into our processes



OUR 4.0 TOOLS

Cegelec CEM incorporates 4.0 technologies to improve performance for our customers:

- ✓ **Development of our PLM system** to effectively manage our projects: Systems engineering, GEDEX for requirement management, GENOM for compliance validation, configuration management, traceability, process management
- ✓ **Our 3D printing:** additive manufacturing of prototypes, models and demonstrators
- ✓ **Operational simulation:** our platform validation tool for instrumentation and control systems is a simulator for the operational side. By modelling and simulating processes (sensors and actuators), electrical cabinets and boxes, control panels (buttons and lights), as well as auxiliary controller applications, Cegelec CEM faithfully reproduces the real-life functioning of its facilities to test and validate applications, interfaces and even hardwired safety channels.

Votre Réalité Virtuelle collaborative multi-sites

Digitalisation totale de vos projets : de l'ingénierie aux chantiers

- ▣ Réseaux de conception collaboratives à échelle réelle
- ▣ Validation d'interventions multi-opérateurs
- ▣ Capitalisation dans un jeu de données numérique
- ▣ Validation dimensionnelle et physique
- ▣ Recherche et analyse de risques
- ▣ Scénarisation et formations complexes



EXTENDED ENTERPRISE

We very often work on a project platform, or in a partnership or consortium. Project management methods undergo continuous improvement and innovation brings new tools for managing, planning, designing and preparing operations.

We share these tools with our customers to **facilitate discussions and the coordination of their projects.**

We also work with our partners and suppliers to **increase their added value and improve the value chain.**

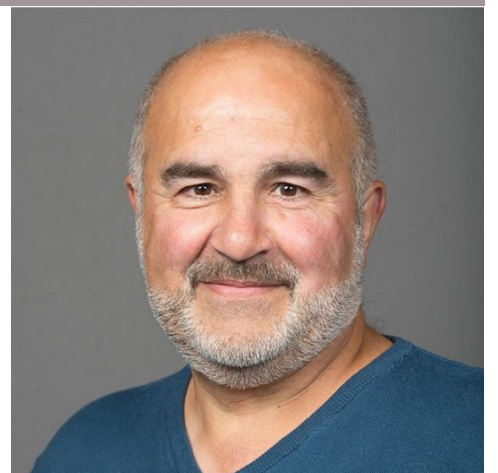
Lastly, we participate in various committees and working groups with major players in the sector, such as the GIFEN, Nuclear Valley and others.



Innovation is natural: everyone constantly seeks to improve themselves, learn new skills, share their experience and satisfy their curiosity. But innovating to create value requires us to anticipate changes in our business, integrate new technologies and promote a culture of innovation within the company. This calls for a human-centric approach, rather than a merely technical one.

JACQUES BARDET

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<https://youtu.be/OHcFk7AjkF8>