



*Veolia Environment's commitment to clean and reliable technologies is safeguarded by SimulationX*

Veolia Environment is a transnational company based in Paris, France. With 220,000 employees in 48 countries and an annual revenue of about €30bn, Veolia Environment is a world leader in water, environmental and energy services.

Veolia Environment Research and Innovation (VERI) teamed up with ITI to develop the Industrial Utilities Package (IUP) for SimulationX in order to provide industry-specific model elements for simulating and analyzing energy-related equipment under dynamic conditions.

**Challenge**

**Efficient industrial components**

Growing energy demand and rising utility bills put huge strains on corporates. They also face increasing pressure from environmental legislation to reduce CO<sub>2</sub> emissions. Veolia Environment as an operator of industrial machinery and power plants looks for ways to develop ecofriendly components and optimize their plants' energy efficiency.

**Solution**

**Industrial Utilities Package**

The Modelica-based IUP allows for detailed simulations of variable system layouts in order to evaluate different configurations. Industry-specific models, parameterization options and control strategies, such as PI controller-based control loops, enable easy analyses of dynamic system behavior.

**Benefits**

**Improved OPEX and global footprint**

Virtual prototyping and system simulation reduce time and costs for enhancements of industrial utilities production plants. Custom solutions for real-life scenarios ensure that more efficient and less pollutant machinery and plants help to also lower operating expenses and meet legal requirements for environmental protection.

»Our partnership with ITI paid off very well as it enabled us to develop and study simulation scenarios in SimulationX tailored exactly to our needs.«

Clément Rebillard, Research Engineer  
Veolia Environment Research and Innovation

