

 SAP  
Innovation  
Awards 2021

# SAP Innovation Awards 2021 Entry Pitch Deck

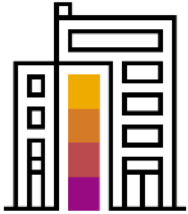
Achieving 360° view and analysis with Smart Water Platform

FARYS

PUBLIC

THE BEST RUN





## Company Information

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**Headquarters** Stropstraat 1, 9000 Gent, Belgium

**Industry** Water utility

**Web site** <https://www.farys.be/>

A major multi-utility in Belgium, FARYS offers municipalities across Flanders a broad range of services, including supplying drinking water supply to about 600,000 customers, sewage management, domain services, sports facilities maintenance, and purchasing services for governments and non-profits.

# Smart water platform

## Farys



**FARYS, Pidpa and De Watergroep turned the challenge to implement smart meters into a chance to further transform their organizations into intelligent enterprises. Together they embarked on a co-innovation journey with Cloud for Energy and created the Smart Water Platform: a next-level, future-proof cloud solution which enables intelligent process transformation, insights-driven analytics, and lays the groundwork for future innovation.**

**FARYS is the first organization to go live with the platform.**

### Challenge

In response to a regulatory push for smart metering, FARYS and two other Flemish water utility companies, Pidpa and De Watergroep, allied with the SAP Cloud for Energy team to design a future-proof, cloud-based water metering platform with extensive data capturing, data processing and data analytics capabilities.

### Solution

FARYS, Pidpa and De Watergroep embarked on a co-innovation journey with SAP to develop SAP Cloud for Energy from its beta version into a fully deployed platform capable of meeting the needs of any water utility company.

### Outcome

As of January 14<sup>th</sup> FARYS has a smart metering platform bringing them into full compliance with regulatory standards and enabling the roll-out and management of smart water meters with massive potential for driving future initiatives. Pidpa and De Watergroep will go live with this platform over the course of this year.



**95%** Expected data accuracy



## Participating Partner Information



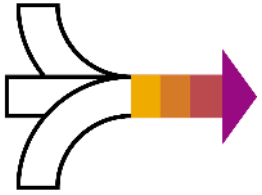
**Capgemini**

**Defining use cases and implementation**



Capgemini, FARYS's long-term transformation partner, supported development by defining use cases and implementing Cloud for Energy on site at FARYS.





## Business Challenges and Objectives

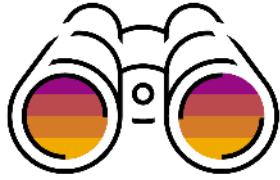
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In their co-innovation journey for SAP Cloud for Energy, SAP, Pidpa, De Watergroep and FARYS sought to design a future-proof cloud-based platform which would:

- combine meter readings and sensor data into a single source of truth
- enable extensive analytics
- seamlessly support future innovative functionalities

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The platform collects meter readings and sensor information to an IoT platform where it can be reused in future scenarios. It supports visualization of data for internal departments and maximal flexibility in data sources, integration and provisioning. FARYS is the first organization to use the new Cloud for Energy Smart Water Platform.



## Project or Use Case Details

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With no out-of-the-box solution available, FARYS teamed up with the SAP development team of SAP Cloud for Energy. The platform they built will provide FARYS with a future-proof solution to manage smart meters and related IoT data.

Given FARYS's extensive SAP landscape, they decided to design a solution using standard SAP, thus making it easy to integrate SaaS SAP solutions. They built the SAP advanced metering infrastructure in SAP S4/HANA, which integrates with SAP Cloud for Energy.

The solution permits for multiple future uses as well, including:

- End-to-end integration of disconnection and flow reduction processes
- Machine learning
- Fault pattern discovery / analytics
- Criticality analysis
- Maintenance plan review
- Water quality management



# Benefits and Outcomes

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## Business or Social

The IT platform is completed, enabling the business to roll out and implement at scale.

In addition to bringing the Flemish water companies into alignment with regulatory initiatives, the platform provides a trove of information for analysis, enabling a 360-degree view of their activity and providing valuable insight for future optimization.

## IT (optional)

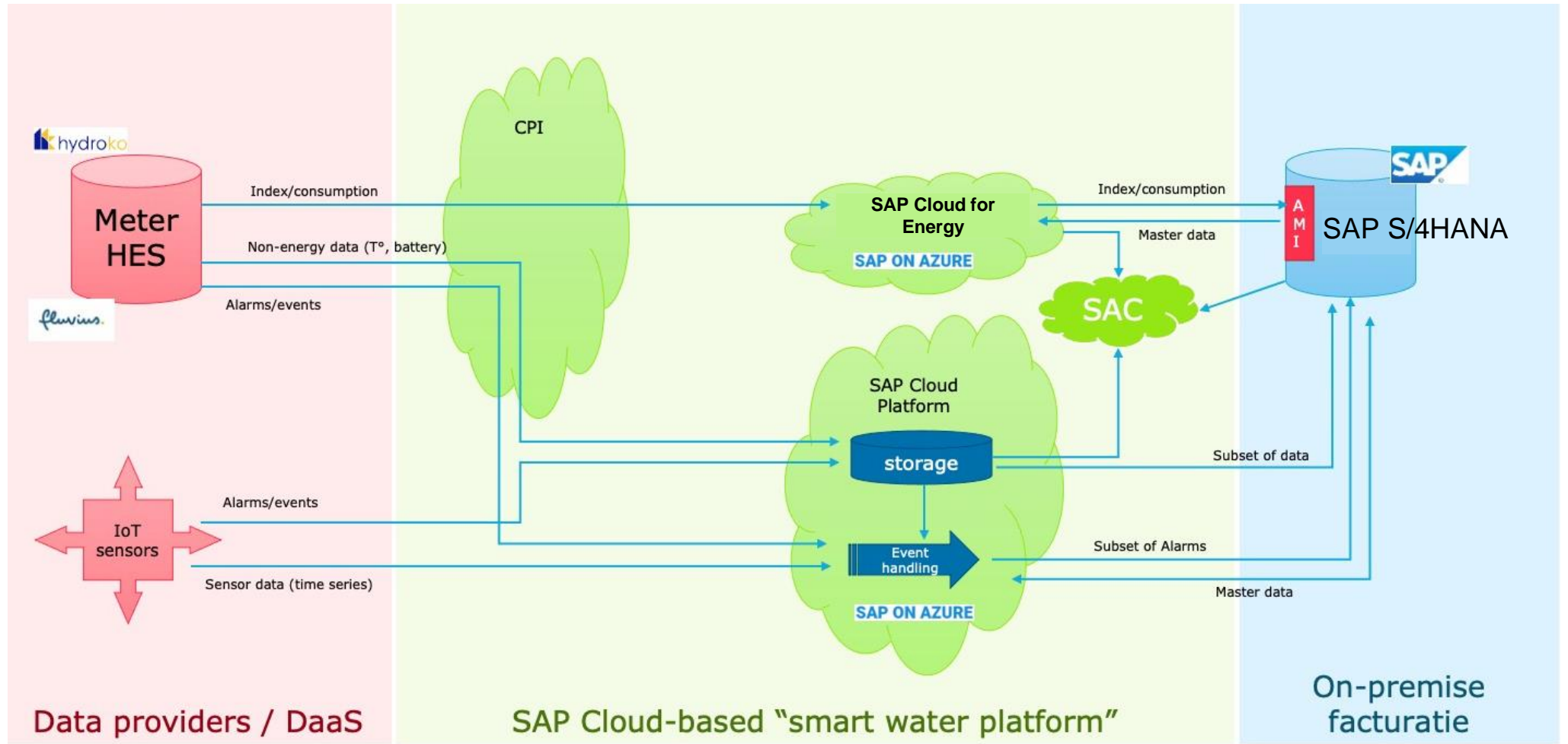
Full SaaS solution enables short implementation time and low cost of ownership. Staying within SAP/cloud infrastructure means simplicity and compatibility.

## Human Empowerment

SAP Cloud for Energy is easy to use, with an SAP Fiori based tool that requires little to no end-user training. This enables maximum utilization within the organization, as employees from each department and every level have access to the same data and analysis.



# Architecture







# Deployment

**Deployment status** Live

**Date** 2021 January 14

**Number of users** 200

## SAP® technologies used:

	SAP product	Deployment status (live or proof of concept [POC])	Contribution to project
1	SAP Cloud for Energy	14 January 2021	Central component in the collection and management of meter readings
2	SAP Advanced Metering Infrastructure for Utilities rapid-deployment solution	14 January 2021	Provides out-of-the-box business processes and automation across ISU and C4E
3			
4			

**5** If you have used one or more of the services or support offerings from SAP Services and Support during the implementation or deployment phase, please indicate which one(s) below with an

SAP MaxAttention™

SAP ActiveAttention™

SAP Advanced Deployment

SAP Value Assurance

SAP Model Company

Others: SAP Cloud for Energy co-innovation program

SAP Innovation Services

SAP Innovative Business Solutions



# Advanced Technologies (1 of 2)

The following **advanced technologies** were part of the project.

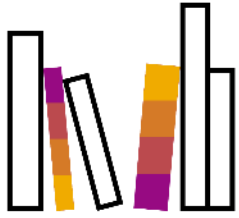
Technology or use case	Product used*	Contribution to project and how product used integrates with SAP products
<b>1 Machine learning or artificial intelligence</b> Robotic process automation, conversational AI, AI-based knowledge graph	No	NA
<b>2 Intelligent data management</b> Multi-cloud, data virtualization and governance, smart data tiering, persistent memory, data privacy	SAP Cloud for Energy	Data analysis supports visualization for internal departments.
<b>3 Advanced and augmented analytics</b> <ul style="list-style-type: none"><li>Real-time and streaming analytics, spatial analytics</li><li>Natural language query and generation</li><li>AutoML to identify trends, patterns, outliers</li><li>Predictive analytics (time series analysis and forecasting, regression, classification)</li></ul>	Planned	The platform versatility enables extensive analytics.
<b>4 Data and analytics solutions in the cloud</b> <ul style="list-style-type: none"><li>Unified data and analytics cloud platforms by SAP</li><li>Modern/self-service data to analytics</li></ul>	SAP Cloud for Energy	Extension of data from S4/HANA



## Advanced Technologies (2 of 2)

The following **advanced technologies** were part of the project.

Technology or use case	Product used*	Contribution to project and how product used integrates with SAP products
<b>5 Advanced cloud integration</b> <ul style="list-style-type: none"><li>• API economy (monetization and API marketplaces)</li><li>• AI-based or crowdsourced integration</li><li>• High throughput, low-latency digital integration hub</li></ul>	SAP Cloud for Energy	C4E supports a standardized API integration layer using a CIM data model
<b>6 Industry cloud platform</b>	SAP Cloud for Energy	
<b>7 Blockchain</b>	No	
<b>8 Internet of Things</b>	Planned	Integration of IIoT sensors possible (direct or through DaaS)
<b>9 3D printing</b>	No	



## Additional Information

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In addition to meeting immediate needs, the Smart Water Platform lays a solid groundwork for future innovation. By collecting data from every measurable source, the platform integrates all components on an organizational scale into a single source of truth. All future data analysis within the organization will thus draw on the data compiled by the Smart Water Platform.

The platform already conducts extensive data analysis, and is set up to support future uses of data such as:

- Machine learning
- Fault pattern discovery
- Criticality/risk-bases assessments
- And much more.

Finally, the cloud-based SAP infrastructure supports maximum compatibility for future solutions. The Smart Water Platform is a crucial step in FARYS's digital transformation and will provide immense value going forward.