



Participate!



FOR SUSTAINABLE INNOVATORS

# Detecting water leaks in Mexico

Develop a cost-efficient solution for Water Systems  
without continuous flow

**SIEMENS**

FOR A SUSTAINABLE WORLD

# Tech for Sustainability Campaign 2023

Tech for Sustainability is a global initiative for students, researchers, startups, and innovative individuals to leverage technology to solve real-world sustainability challenges and shape our future alongside Siemens.

## Leverage technology to shape a sustainable future

Siemens AG is a technology powerhouse that brings together the digital and real worlds to benefit customers and society and thus people around the globe. The company - having shaped each of the four industrial revolutions - focuses on intelligent infrastructure for buildings and decentralized energy systems, on automation and digitalization in the process and manufacturing industries, on water solutions, and on smart mobility solutions for rail transport, but also in financial services and software development.

As a global ideation campaign, Tech for Sustainability is designed to engage innovators outside of Siemens in order to come up with unique solutions for problems with a focus on sustainability. In a hackathon, the innovators who have been particularly successful in the early stages of the Campaign will have the opportunity to create a proof-of-concept and proof-of-feasibility for their ideas. The different phases of the campaign and their timeline are shown in figure 1.

**“Sustainability is in our very DNA. It is not an option. It is a business imperative.”**

*Judith Wiese, Chief People and Sustainability Officer, Member of the Managing Board of Siemens AG*

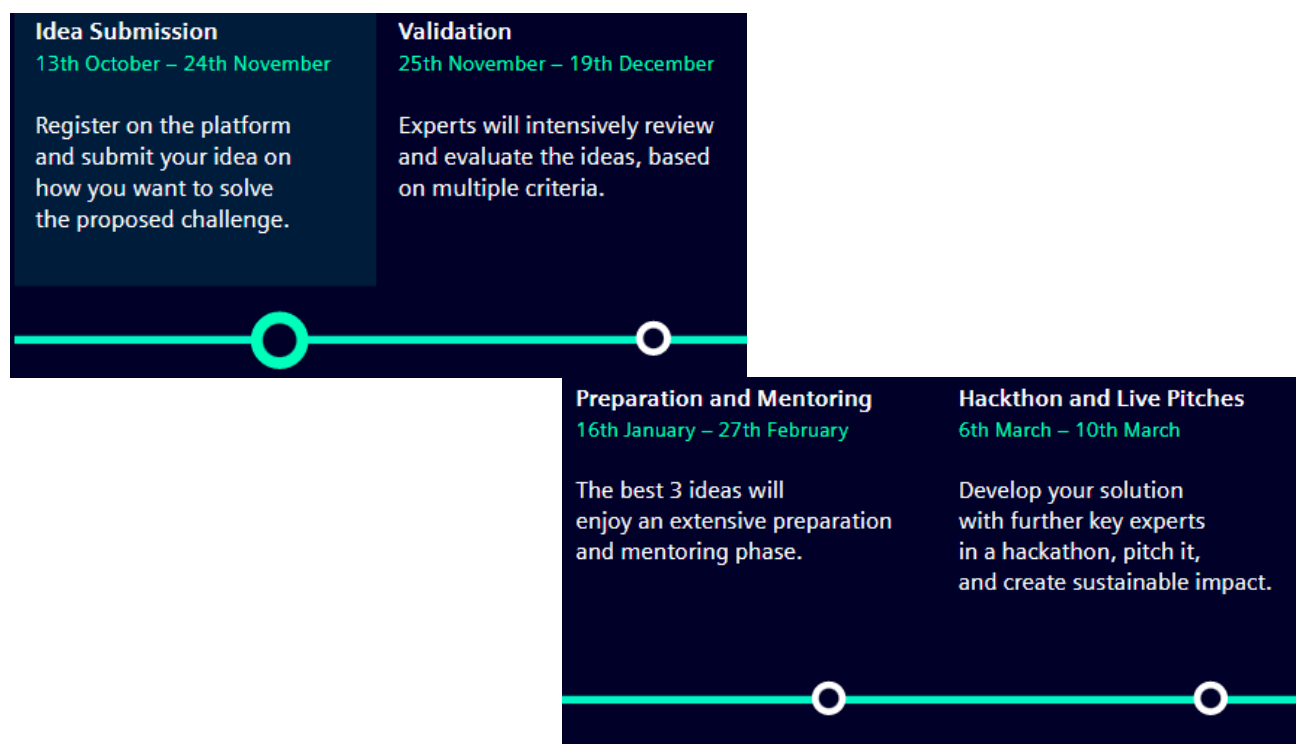


Figure 1 - Timeline and phases of the campaign



### What's in for you?

1. Work with us - Let's solve real problems together to move towards sustainability.
2. Work on-site - The teams with the best ideas will develop their applications further during a hackathon. They will get to work on-site or remotely for the development of their proof-of-concepts.
3. Win Prizes - Three winning teams per challenge – 1<sup>st</sup> 5,000€, 2<sup>nd</sup> 3,000€ and 3<sup>rd</sup> 2,000€

### How do you get to the next phase?

All ideas will be evaluated by Siemens experts based on the following criteria. So, keep them in mind:

- a) Innovativeness: Incremental or disruptive innovation
- b) Sustainability: DEGREE and impact on the UN Sustainability Development Goals
- c) Feasibility: Degree of technical and/or economic feasibility
- d) Potential: Fit to Siemens processes, products and markets
- e) Implementation: General implementation efforts (Time to market, R&D costs, etc.).

**Join the campaign and create impact on real problems together with go-getters and solution seekers of the world by submitting your ideas.**

<https://siemens.com/techforsustainability>

## SIEMENS MEXICO CHALLENGE

# Detecting water leaks in Mexico

## Develop a cost-efficient solution for Water Systems without continuous flow

Although water is one of the fundamental resources needed for life to exist, billions of people continue to suffer from poor access to drinking water. A key indicator of a well-functioning society is its ability to efficiently store and deliver water to its inhabitants. Millions of liters of water are lost around the world due to water leakages each day. The challenge then is to find out where exactly the leak occurs and repair it at the earliest to reduce water wastage.

While sensor technology is being used find leakages in pipes today, the actual technology is designed for continuous water stream. In Mexico and many other countries in the world, the water supply stream is not continuous. This renders the existing technology to be not suitable.

Therefore, there is a need for a new solution to identify leakages and repair the water pipes as soon as possible to conserve water wastage. We need your help to find a creative, new solution.

## Did you know that 40% of the drinking water in Mexico is lost due to leakages?

To track leakages in water pipes with a continuous stream of water, Siemens has developed a solution called SIWA Leakplus. So far, this solution is not ideal for environments where the water delivery stream is occasional, like for example in parts of Mexico (and in other parts of the world as well). Currently, automaton devices and sensors are widely used for generating and collecting data. We are looking for new ways (even a new technology) that could help us find leakages in water pipes without a continuous stream of water. Open and publicly available data sources can be introduced and facilitated.

### How can you create impact?

We want to implement this solution as a pilot with a water utility partner in Mexico. Siemens water experts will support you with information on the Mexican water system and with their technical expertise.

We are looking for people with creative ideas, innovative approaches who are interested to solve the water leakage issues in Mexico, with the potential of of implementation in other regions with the same challenge.

The main purpose of our challenge is to dramatically reduce the loss of drinking water through leakages. There could be many solutions this problem. We appreciate your creativity and ideas to getting this challenge solved.

**Be a part of the solution to the challenge, help future generations in the world by submitting your ideas!**

In Mexico 3,096,000 liters of water is lost per day. This water could have been used to fulfill the needs of 154,800 people per day (considering 200l/day average consumption).

Our wish is to find a cost-efficient solution to reduce the drinking water loss in Mexico. We are looking for a solution) that makes it easier to find the leaks in the water supply, save money, but must importantly save water for people!

**Do you want to be part of a sustainable water supply with Siemens? What are you waiting for? Tune in on the kick-off event on the 13<sup>th</sup> of October at 4:30 p.m. (CET) and submit your solution!**

Tech for Sustainability Campaign - For a sustainable world

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