



WELCOME!

Congratulations on being selected as an Internet of Water De Nora Idea Challenge finalist!

We're proud to have you on board and can't wait to work with your team to develop your idea together.

During the development period, your team will work side by side with a De Nora mentor and the IoW Challenge team to provide you with the necessary tools, documentation, and guidance throughout the whole process.

What's next? Here below a detailed explanation of the challenge steps.

For questions at any point in the challenge you can contact us at michele@kreativdistrikt.com

Let the journey begin!

AGENDA

- 9th February: End of registration period
- 16th February: Challenge finalists' selection
- 17th February: Starter kit is sent
- From 21st February: Scheduling Kick-off call with Team Mentor and preparation for Development period
- 25th February: Internet of Water De Nora Idea Challenge Kick-off webinar
- 8th March - Milestone #1 – PROBLEM DISCOVERY
- 22nd March - Milestone #2 – IDEA PROPOSITION
- 14th April: Final Submission – PROJECT SUMMARY
- 2nd May: End of judging period
- 3rd May: Winner's announcement

STARTER KIT

On the 17th of February, you will be provided with the Starter kit which will be composed of 3 documents:

- 1) PRACTICAL GUIDE (this document)
- 2) CHALLENGE RESOURCES
- 3) SUGGESTED PROCESS AND TOOLS

These documents include resources, free datasets, documentation on De Nora's products and services, useful articles, and much more information you may need to inspire and develop your idea. We strongly recommend you take the time to explore them thoroughly before the Internet of Water De Nora Challenge Kick-off webinar.

KICK-OFF CALL WITH YOUR MENTOR

The IoW challenge team will get in touch with you to schedule a kick-off call with your assigned De Nora's mentor.

In this call, we will address together any concerns you may have regarding how the mentor can support you while proceeding with your project; we will also define the best channels and frequency for you to be always in direct communication with your Mentor.

The mentor will be assigned taking into account your team's competences and your idea. Mentors will be selected from the following De Nora's Departments: Business Development; Product Management; Digital Transformation; Engineering; Sales & After Sales.

Please note that:

- Your mentor is not supposed to coordinate your team; he/she will assist you with all the information you need related to De Nora's technology, business, products, services and value proposition. He/she will put you in contact with other De Nora's experts in case more information is needed.
- The IoW challenge team will support you with the process, requested documentation, tools, and technical support.
- Throughout the duration of the challenge, you can contact michele@kreativdistrikt.com for any assistance regarding the milestones' content or other organization issues

INTERNET OF WATER DE NORA IDEA CHALLENGE KICK-OFF WEBINAR

On the 25th of February at 6 PM – CET (Central European Time), we will gather all together for the challenge kickoff webinar. It will be the opportunity to deep dive into the challenges of the water sector and its potential for digitalization for inspiring your work!

De Nora Water Technology's CEO, Mirka Wilderer, will officially launch the initiative.

The IoW Challenge team and De Nora's expert and judges will be there as well!

We will have keynote speakers touching some important topics for the 4 challenge categories, followed by a Q&A session to cover any of your questions.

Here's the preliminary agenda:

CET TIME ZONE

- **6:00 – 6:20 PM – Launch of the IoW De Nora Idea Challenge** – Mirka Wilderer – CEO of De Nora Water Technology (DNWT)
- **6:20 – 6:40 PM – De Nora's Company Presentation: role within the water cycle** - Daryl Weatherup - General Manager of the Disinfection & Filtration Global Business Unit at DNWT
- **6:40 – 7:00 PM – Launch of Challenge 1 – Water Quality and Availability** – Paul Westerhoff – Regents Professor at Ira A. Fulton Schools of Engineering, Arizona State University
- **7:00 – 7:20 PM – Launch of Challenge 2 – Business Model Innovation** – Shirley Ben-Dak - VP Strategy & Innovation at SWAN Forum
- **7:20 – 7:40 PM – Launch of Challenge 3 – Digitally Enhanced Water Treatment** – Gianluca Salviotti - Professor of Digital Transformation, Bocconi University
- **7:40 – 8:00 PM – Launch of Challenge 4 – Simplification of Design, Operations & Maintenance** – Ben Gillis - Director of Digital Transformation, DNWT
- **8:00 – 8:30 PM – Q&A**

US EASTERN TIME ZONE

- **12:00 – 12:20 – Launch of the IoW De Nora Idea Challenge** – Mirka Wilderer – CEO of De Nora Water Technology (DNWT)
- **12:20 – 12:40 – De Nora's Company Presentation: role within the water cycle** - Daryl Weatherup - General Manager of the Disinfection & Filtration Global Business Unit at DNWT
- **12:40 – 1:00 PM – Launch of Challenge 1 – Water Quality and Availability** – Paul Westerhoff – Regents Professor at Ira A. Fulton Schools of Engineering, Arizona State University
- **1:00 – 1:20 PM – Launch of Challenge 2 – Business Model Innovation** – Shirley Ben-Dak - VP Strategy & Innovation at SWAN Forum
- **1:20 – 1:40 PM – Launch of Challenge 3 – Digitally Enhanced Water Treatment** – Gianluca Salviotti - Professor of Digital Transformation, Bocconi University.
- **1:40 – 2:00 PM – Launch of Challenge 4 – Simplification of Design, Operations & Maintenance** – Ben Gillis - Director of Digital Transformation, DNWT
- **2:00 – 2:30 PM – Q&A**

You will receive all the necessary information to join the webinar directly by email.

For any issues: michele@kreativdistrikt.com

MILESTONES DEFINITION

The following are the deliverables that will be requested from your team in multiple deadlines.

The delivery of each milestone by the due date is mandatory in order to be eligible for the final prize.

You're free to organize your team work, and to use your preferred tools.

For your convenience though, here are a couple of useful links to online collaboration platforms and spaces:

<https://miro.com/>

<https://www.mural.co/>

MILESTONE 1

Title: PROBLEM DISCOVERY

Due date: March 8, 2021

Format: Document - 2 pages (word/pdf)

Definition:

This document should clearly define your most important customers (those people or organizations for whom you are creating value), highlighting their main problems and pain points.

It should address the following points:

- **Customer definition:** Who are the customers – may they be external or internal to De Nora – that will benefit from the problem solution? What are their pain points? Who is the target group of customers, i.e., the most important ones for your solutions? Who are the early adopters?
- **Problem statement:** What is the problem you would like to address? Which opportunities you have identified?

This milestone should be developed engaging with your Mentor, relying on the documentation and resources provided with the starter kit, and additional autonomous research, investigations, surveys, and inquiries.

MILESTONE 2

Title: IDEA PROPOSITION

Due date: March 22, 2021

Format: Document - 2 pages (word/pdf)

Definition:

This document should explain your idea proposition, the features of the product/service/tool/activity that you would like to offer, and how it delivers value to the customer; it should also include the impact on the community and the environment.

It should address the following points:

- **Technical feasibility:** How technically feasible would the implementation of the solution be? Are you building on some of De Nora's core operational strengths? Does the solution require building completely new capabilities? How easy would it be to outsource such capabilities?
- **Market desirability:** Which customers' problems are you helping to solve? What are you offering to each customer segment? Are you solving for the right customers' pain point? What task are you helping the customer complete?
- **Business potential/market viability:** How much short- and long-term revenue potential does the solution represent? Does your business model fit with the way customers want to use the solution and pay for it?
- **Added value & Uniqueness:** How does the solution increase De Nora's value proposition? What makes your solution different and original? Can anything similar be found on the market? Can you think of potential intellectual property protection strategies?

MILESTONE 3

Title: PROJECT SUMMARY

Due date: April 14, 2021

Format: Document - 4 pages (word/pdf)

Definition:

A comprehensive document that describes your project and summarizes all the work you have done throughout the development period, providing vital information and communicating your project entire story.

The document is structured as follows:

PROJECT DATA

- **Project Title:** indicate the name of your project
- **Team Name:** indicate your team name
- **Team Members and contact:** list your team members with their preferred contact email.

SOLUTION

- **Executive summary:** Briefly describe your solution (max 600 characters)
- **Starting point:** What problem are you addressing? What challenges are you solving? Which opportunities have you identified? Who is the target group of customers for your solution? What are their pain points?
- **Proposed solution:** What is your final product/service/tool/activity? How could the solution leverage digital technologies for the benefit of the customers, the community, and the environment? How technically feasible is the solution you propose, considering the partnership with De Nora? How much short- and long-term revenue potential does the solution represent? How viable is the proposed business model? How does the solution increase De Nora's value proposition? How unique is the solution, and why is it better than the state of art?
- **Implementation Plan:** Identify the steps necessary to implement your project. The plan should consider all relevant aspects, such as necessary resources, interaction and contribution from the key stakeholders and key partners, duration of the implementation steps; ...
- **Impact:** An explanation of the expected results and of the impact that your project could have on De Nora's current or new customers, the community, the environment. You should also specify how your solution would impact the digitalization of De Nora's products and how you intend to measure its success.

ANNEXES (OPTIONAL BUT RECOMMENDED)

Any attachment to your project that could further clarify, extend, detail, and thoroughly explain your solution further: e.g., other documents/presentation/digital representation/mock-up demo/ video, etc.

In case you'd like to create a video, please follow these guidelines:

- It must be shorter than 5 minutes;
- It must include footage that clearly explain your project summary
- It must be uploaded to YouTube or Vimeo and a link to the video must be provided
- It must not include third party trademarks, or copyrighted music or other material unless the Participant has permission to use such material.

The IoW Challenge team expertise will be available for the participants if video creation support is needed.

Milestone 3 MUST be delivered using the template [downloadable here](#) and delivered by email or by a download link to michele@kreativdistrikt.com by April 14th, 2021 before 24:00 – CET

JUDGING PERIOD

From April 15th to May 2nd, the judges will evaluate your submissions and select the winners.

Your final submission will be evaluated solely considering the Project Scope document. Nonetheless, the delivery of the first two milestones is mandatory in order to be eligible for the final evaluation.

Judging criteria:

- **50 POINTS:** How effectively the project adds value for the final customers of De Nora's products; How it helps promote the usage of De Nora's products and services.
- **10 POINTS:** How effectively the project addresses environmental and health issues.
- **10 POINTS:** How technically feasible the implementation of the solution is
- **10 POINTS:** How much short- and long-term revenue potential the idea represents and how viable the proposed business model would be.
- **10 POINTS:** How unique the idea/solution is and how it helps solving water industry challenges.
- **5 POINTS:** Punctuality in the milestones and project delivery
- **5 POINTS:** Project documentation graphic design and clarity of the information

WINNERS ANNOUNCEMENT

Winners will be announced on or around the 3rd of May.

The Team Leader will receive a direct email informing about the results.

PRIZE DELIVERY

Cash prizes will be distributed in the form of a cheque.

Monetary prizes will be mailed to the winning Participant's address (if an individual) or the Team Leader's address (if a team or Organization). Prizes will be payable to the Participant, if an individual, to the Team Leader's, if a team, or to the Organization, if the Participant is an Organization. It will be the responsibility of the winning Team Leader to allocate the Prize among their team or Organization's participating members, as the Team Leader deems appropriate. Prize Delivery Timeframe is 60 Days after Winner verification process. Winners will bear the cost of Prize Import Taxes.

The prize will be distributed in the form of Amazon Vouchers where cheque cash prizes are prohibited.

Amazon Voucher prizes cannot be substituted, assigned, transferred, or redeemed for cash; however, the Organizer reserves the right to make equivalent prize substitutions at its sole discretion. Organizer will not replace any lost or stolen prizes or components of a prize(s). Prize cannot be used in conjunction with any other promotion or offer. The Organizer will not

award a Prize if there are no eligible Submissions entered in the Challenge, or if there are no eligible Participants or Submissions for a specific Prize.

NOTES:

The IoW Challenge organization can decide, at any point in the challenge to extend any of the project phases (such as development period, judging period, etc).

You will be informed promptly by email.

ABOUT DE NORA

De Nora is an Italian multinational leader in sustainable technologies, that offers energy-efficient products and water treatment solutions. We are the largest supplier in the world of insoluble electrodes for electrochemical applications and a leading player in providing equipment, systems and processes for water disinfection and filtration. Our technologies are recognized as a high value-added enabling factor facilitating transformational processes for many industrial applications: chemistry, water purification, electronics, energy storage and infrastructural corrosion protection.

De Nora Water Technologies provides a range of trusted disinfection, oxidation and filtration technologies and aftersales support services for water and wastewater treatment in the energy, marine and municipal markets worldwide. With more than 50 years' experience in water treatment, the company has developed, delivered and installed thousands of installations worldwide across a variety of applications. De Nora Water Technologies combines leading R&D capabilities with water treatment engineering expertise to continuously improve and broaden its technology offering portfolio. De Nora's brands and its Water Technologies portfolio are recognized worldwide for their contribution to water treatment operators in providing a safe source of water and wastewater.

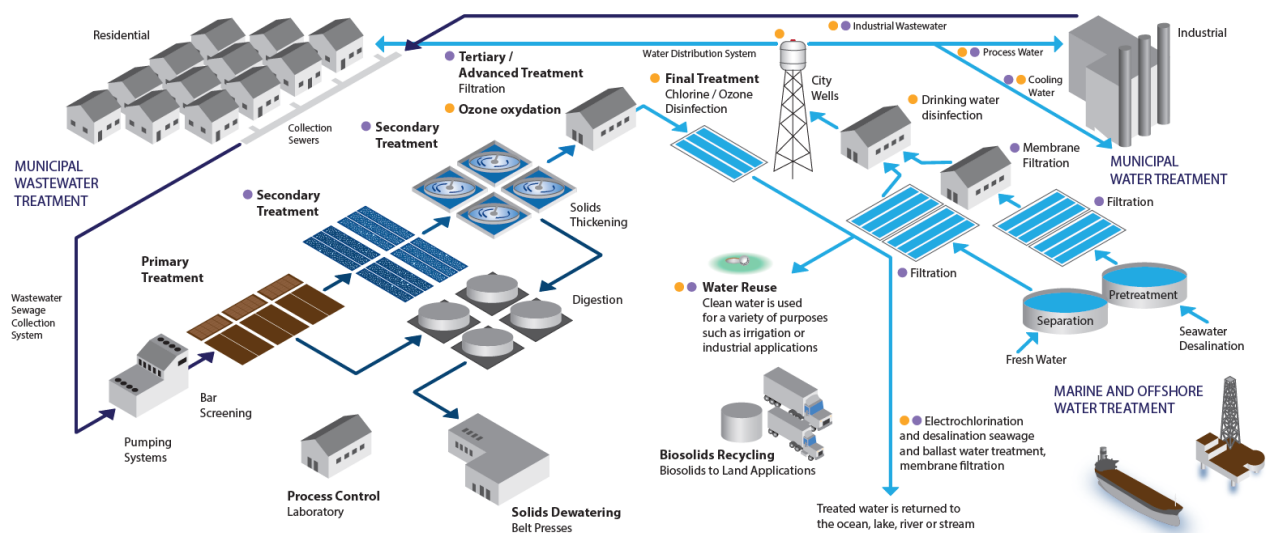


Figure 1 – The water cycle and De Nora's treatment technologies.¹

¹ Purple and orange circles indicate the steps where De Nora can offer filtration or disinfection solutions, respectively.

DE NORA'S PRODUCTS

De Nora has an unsurpassed range of disinfection technologies and pioneered both gas chlorine systems and on-site generation of sodium hypochlorite from salt. In case a more powerful oxidant is required, De Nora also offers ozone systems to meet any requirement. De Nora also supplies systems combining ozone, UV and other biocides for advanced oxidation processes (AOP) to treat water with PFAS and micropollutants.

De Nora has a full complement of filtration technologies designed to make filtering and polishing of water and wastewater streams easy.

CAPITAL CONTROLS®: ozone generators, gas feed systems, chlorine dioxide generators

ClorTec® and CECHLO®: On site sodium hypochlorite generators

UltraDynamics: UV disinfection

MicroChem®: Analyzer and Controller

De Nora TETRA®: filtration solution for drinking water and tertiary treatment:

SORB™: inorganic and contaminant removal

SEACLOR® and SANILEC®: seawater electrochlorination

BALPURE®: Ballast Water treatment

OMNIPURE®: marine sewage treatment

UAT™: reverse osmosis packages for desalination and water polishing

EST™: emergency scrubbing towers

De Nora VIA™: remote support services