



SUSTAINABLE BY DESIGN

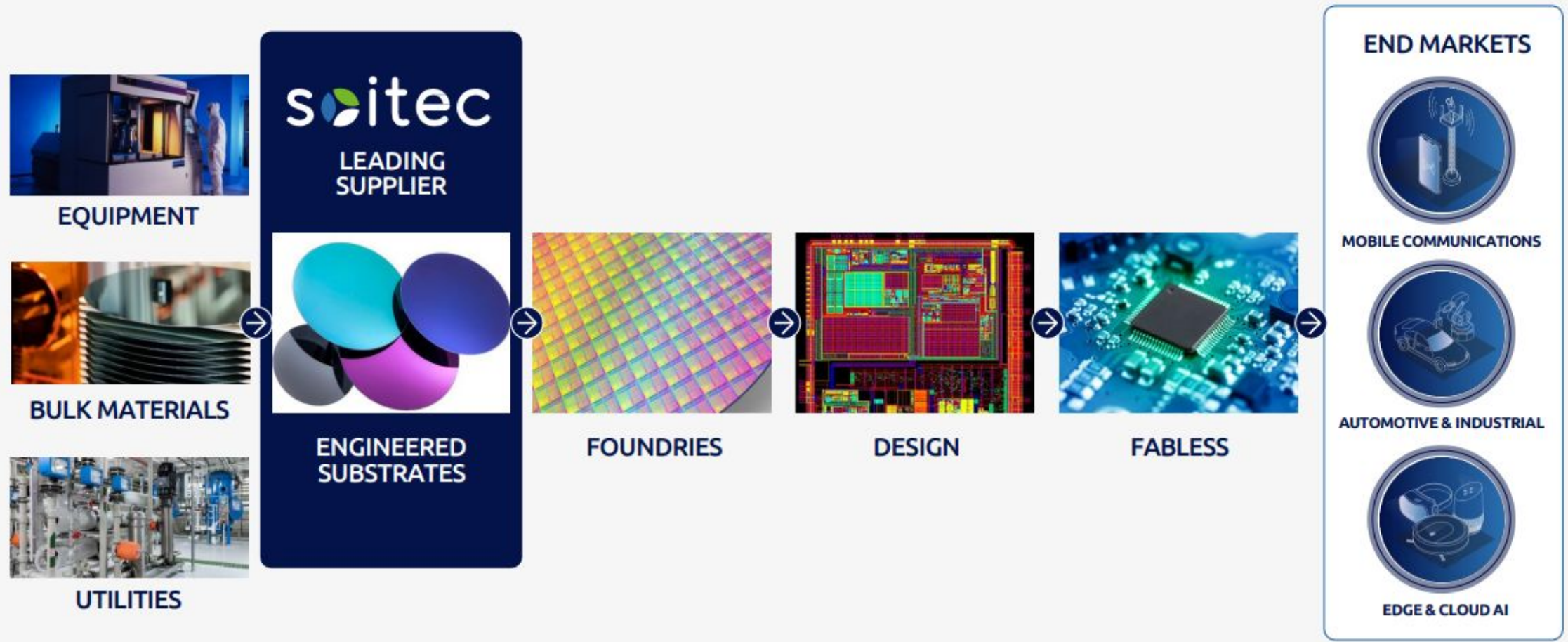
Fanny Bernard, Deputy Sustainability

Franck Poulet, France Compound Operations Director

SEMICON EUROPA | 2024



SOITEC ENABLES A SUSTAINABLE SEMICONDUCTOR VALUE CHAIN



“

We are the **innovative soil**
from which smart and energy
efficient electronics grow into
amazing and sustainable life
experiences.”



SECTION 01

SUSTAINABLE INNOVATION



SUSTAINABLE INNOVATION

Innovate to make our products the cornerstone of a more sustainable future



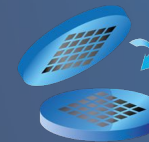
OUR APPROACH

Our products are essential for the deployment of technological revolutions such as 5G, autonomous cars and artificial intelligence. Our innovation are intended to reconcile performance and energy efficiency.

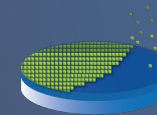
OUR ACHIEVEMENTS



14%
of revenue dedicated
to R&D in FY24



~ 400
patents files each
year



6 life
cycle analysis

GREENOVATION, THE SOITEC ECODESIGN APPROACH

Ensure that environmental issues are included in selection criteria at every stage of our product design and manufacturing process.

OUR APPROACH



Measure the **environmental impact** of the product throughout the life cycle



Measure and challenge the **consumptions of the tools**



Design new products taking into account their environmental impact



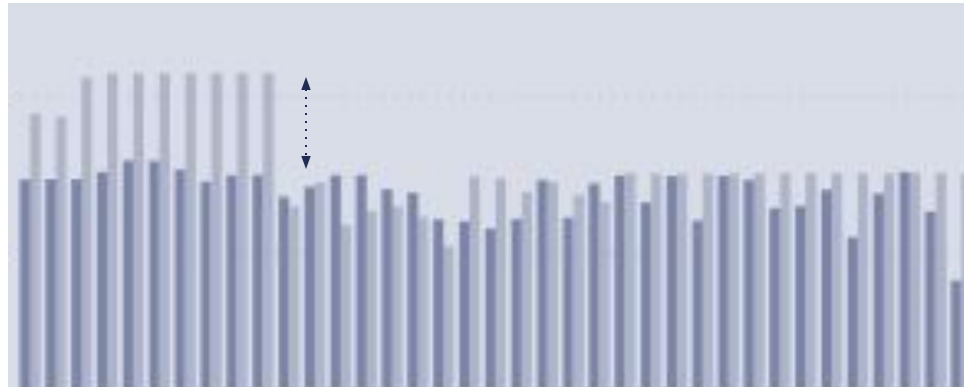
Challenge business **opportunities** with environmental considerations



EXAMPLE

Optimizing the water consumption of the ultra pure water ozoner thanks to the measures

Water consumption gap of 2 ozoners



↔ **12 m³**
GAP PER DAY
BETWEEN 2
OZONERS

💧 **4380 m³**
SAVINGS PER YEAR



Environmental criteria integrated in our decision processes

Fiscal months Operational weeks Operational days

Multiple selections ▼ All ▼ All ▼

Fiscal Quarter

All ▼

Daily ▼ Monthly ▼ Weekly ▼

UPW Consumption Reporting Aggregations

Water consumption comparison per stage (process_step_id) and process

[Clear All Filters on this page](#)

Per M3 / L

Per L Per m3

Per Water (Est. C) Total

Per Water

Tab

All ▼

Site ▼

Equipment ID ▼

All ▼

State ▼

All ▼

Process Step (Stage) ▼

All ▼

Process ▼

PSH ▼

Planning family ▼

All ▼

Lot type ▼

All ▼

Toolset ▼

Consumption Per Process Per Tool Per Wafer Per L

Consumption Per Process Step Per Wafer Per L

Consumption

Consumption Per Process Per Wafer Per L

The screenshot displays the 'Eco-brief' software interface. At the top left is the 'soitec' logo. Below it, the text 'Eco-brief' is visible. The main section is titled 'Product settings' and includes a dropdown menu for 'Unit' set to 'kg CO2' and a dropdown for 'Owner - Technic manager'. Below this, there are two large circular gauges: a grey one on the left showing '80 kg CO2' and a yellow one on the right showing '13 kg CO2'. To the right of these gauges is a small table with two rows: 'FD 50' and 'FD 100', each with a dropdown arrow. Further right is a vertical sidebar with a 'Settings' section containing 'Unit: kg CO2', 'Product: FD 50', and 'Life cycle: LCA'. Below this is a 'Main panel' with a 'Life cycle' section showing a bar chart with three bars (green, yellow, red) and a 'Life cycle' section showing a bar chart with three bars (green, yellow, red). At the bottom, there are two smaller charts: a 'Life cycle' chart on the left and a 'Life cycle' chart on the right.

ewec | soitec

**Ecodesign
guidelines for
early R&D**

Decision matrix: Environmental impact investment

Investment : Environmental impact ? (absolute values)

Consumption or reject

- Energy
- CO₂
- Water
- New chemical**
- Other

Gain / neutral

Tool already optimized

Feasibility of gains on New generation

Copy tool

New Tool

Consum or reject tool

In case of optimization inform by mail HSE team

HSE should optimize further a number of the HSE team to the day run

To change the bottom: decide who is right side

***Absolute values (costs) consumption / reject or fully loaded investment**

**** New Chemical - ISE not necessary**

SECTION 02

CLIMATE





CLIMATE CHANGE

Take actions to limit global warming to 1.5°C



OUR APPROACH

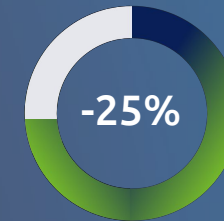
As a player in the microelectronics industry, we must take action to limit the impact of our activities on global warming.

To this end, we have decided to align ourselves with the 2015 Paris Agreement's most ambitious climate pathway: limiting global warming to 1.5°C above pre-industrial levels.



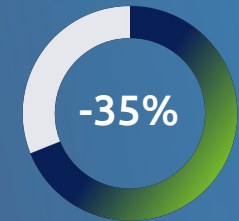
OUR FY26 OBJECTIVES

Scopes 1&2



absolute
emissions vs
2020

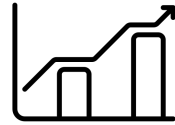
Scope 3



emissions
intensity
(tCO₂eq./€m of
added value)

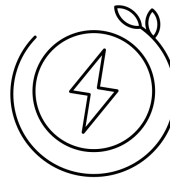
CLIMATE CHANGE: 5 PILLARS TO ACHIEVE OUR OBJECTIVES

IMPROVE THE ENERGY PERFORMANCE OF OUR INDUSTRIAL FACILITIES



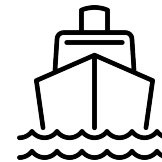
- Energy saving plans
- Investments
- Optimization
- Improvements of the environmental quality of our new buildings

PRIORITIZE LOW-CARBON ENERGY



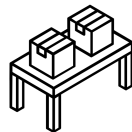
- Hydroelectric power use
- Replacement of the gas-powered boilers with electricity-powered ones
- Use of biomethan & solar energy production
- PPA Singapore

FAVOR LOW-CARBON FREIGHT



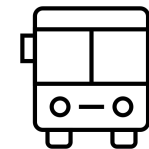
- Reduction & optimization of the distances traveled by our wafers
- Favoring sea freight over air freight

ENCOURAGE OUR SUPPLIERS IN A LOW-CARBON APPROACH



- Supplier decarbonization roadmap: better measure and reduce
- Integration of ESG criteria into our supplier selection, performance review and auditing processes
- Encouragement of the suppliers to improve their energy practices

ENCOURAGE OUR EMPLOYEES TO REDUCE THEIR CARBON FOOTPRINT



- Investments towards soft mobility
- Awareness-raising to best practices in heating and cooling
- Launch of a program for more responsible digital technology

FOCUS ON: THE CARBON ROI

ENCOURAGING SUSTAINABLE CAPEX

Adding a “bonus” in the cash representing the “Soitec internal price of carbon”

Step 1

Focus on Capex > 200k and
capex sustainable

Step 2

ALL the capex
Thinking to integrate the carbon cost of the
tools manufacturing and the R&D projects
(LCA)

FOCUS ON: THE FREIGHT



SECTION 03

WATER



WATER MANAGEMENT

Manage and reduce our water consumption

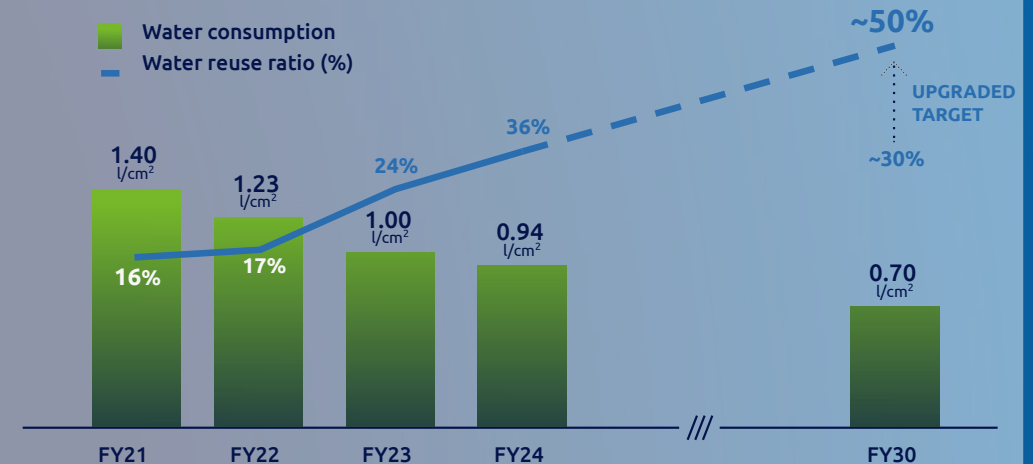
OUR APPROACH

For more than 10 years, we have been developing innovative programs to reduce our water withdrawals and increase the proportion of recycled water used in our processes.

OUR ACHIEVEMENTS

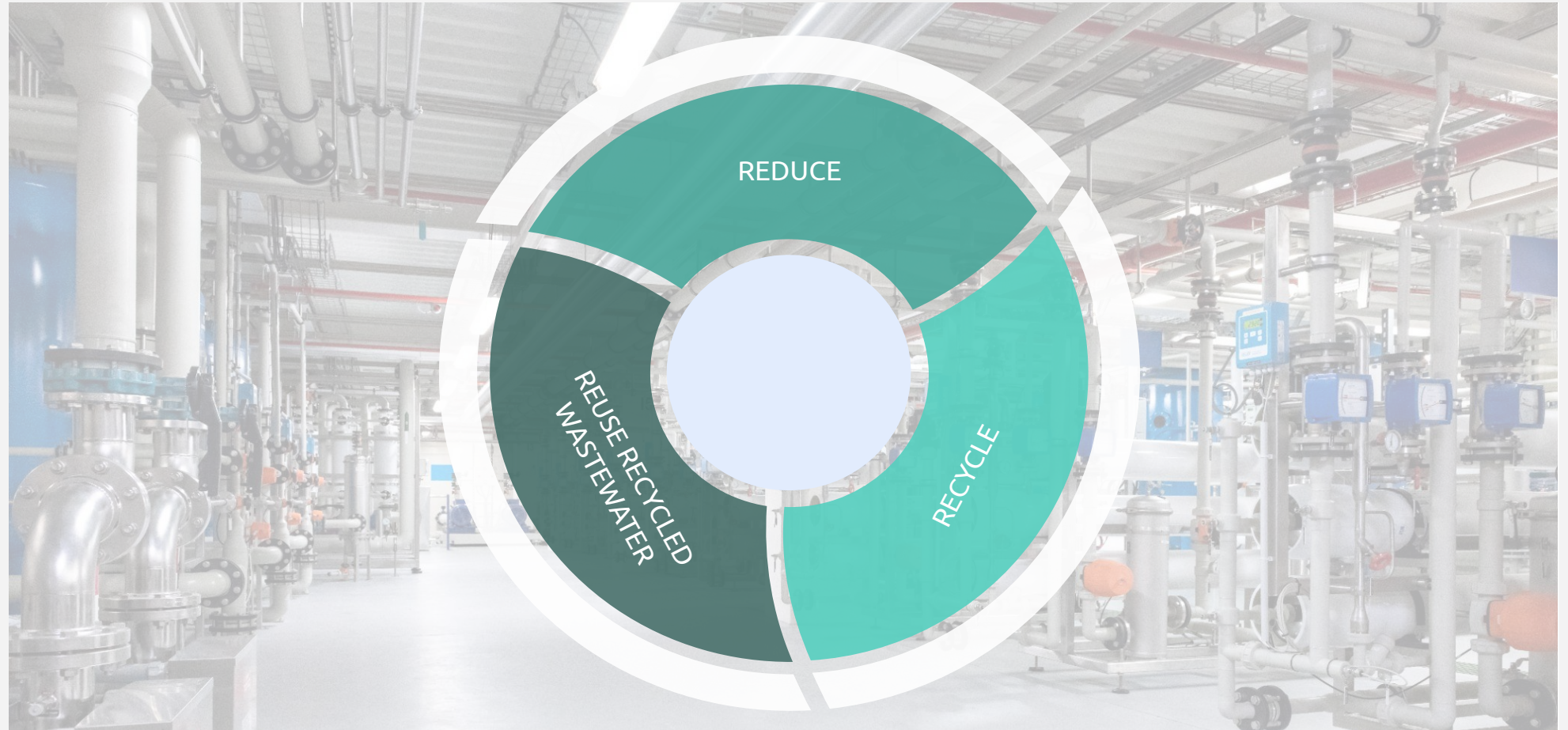
-50% OF WATER CONSUMPTION PER UNIT OF PRODUCTION BY FY30 vs FY21

Water reuse ratio above target in FY24 - Raising FY30 target



OUR WATER STRATEGY

Reduce, Recycle, Reuse recycled wastewater



REDUCE OUR WATER WITHDRAWALS

BETWEEN 2022 AND 2023 ...



HOW?

- ✓ 30 ACTIONS COMPLETED
- ✓ 8 DIFFERENT TOOL TYPES
- ✓ TRANSVERSAL WORKING GROUP WITH MANUFACTURING AND FACILITIES
- ✓ B4 NEW FAB STARTED WITHOUT ADDITIONAL WATER INTAKE

REUSE OF THE WAFER RINSE WATER: 1ST TIME IN EUROPE

New installation allowing wafer rinse water to be partially reused in the production of ultra-pure water for its cleanrooms in France

THE RECYCLE PROCESS WASTEWATER IN UPW PRODUCTION



- ✓ Mapping the quality of the wastewater rejected by the cleaning tools
- ✓ Segregate the streams compatible for recycling purpose
- ✓ After quality check and treatment, reinjection of the water into the UltraPure Water station to recycle it in production

KEY DATA



89% OF THE WATER OF THE BERNIN SITE IS CONSUMED FOR THE ULTRA PURE WATER PRODUCTION

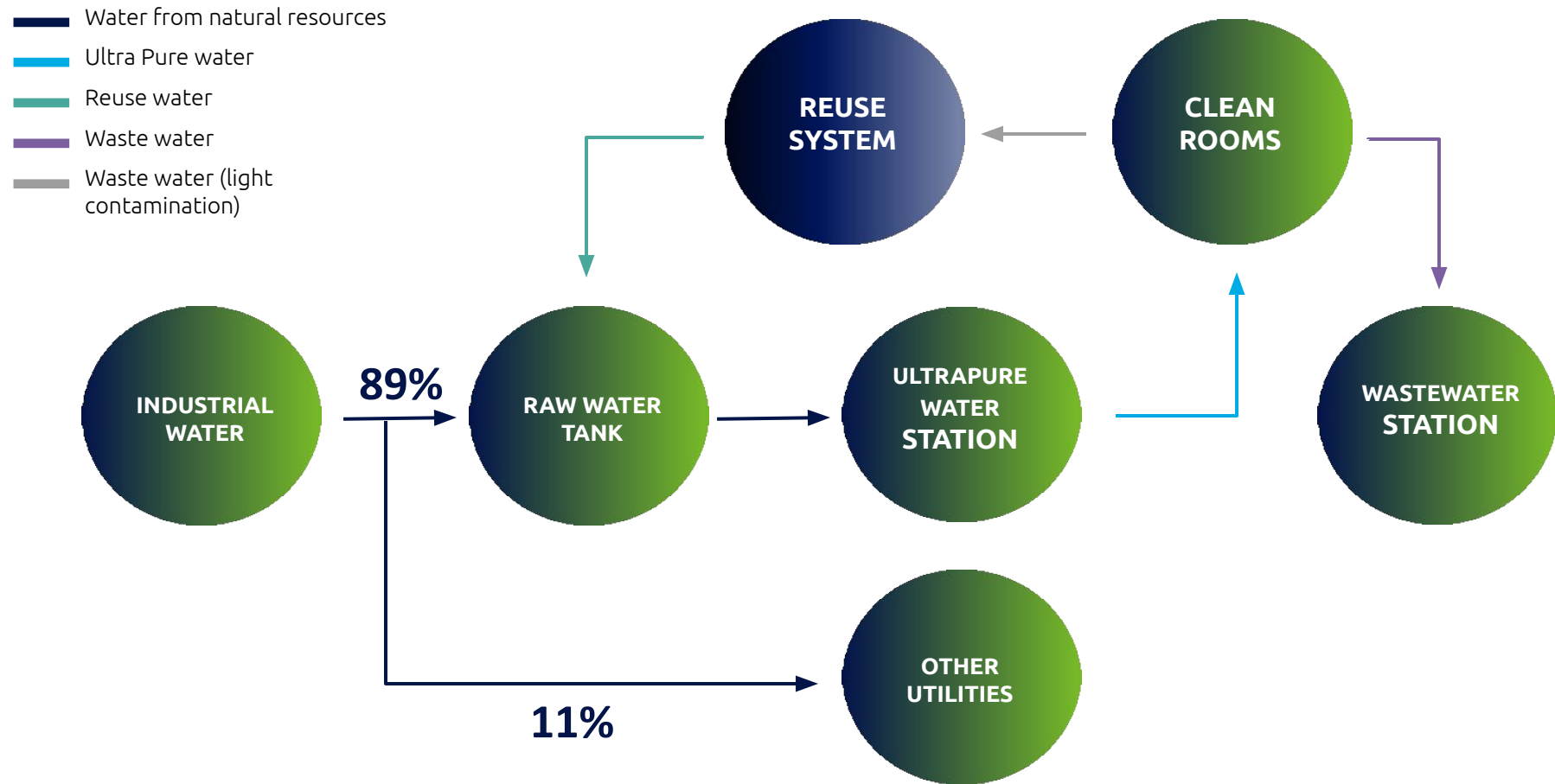
19% → 35%

EXPECTATION OF OUR WASTEWATER REUSE RATE GROWTH IN 2024

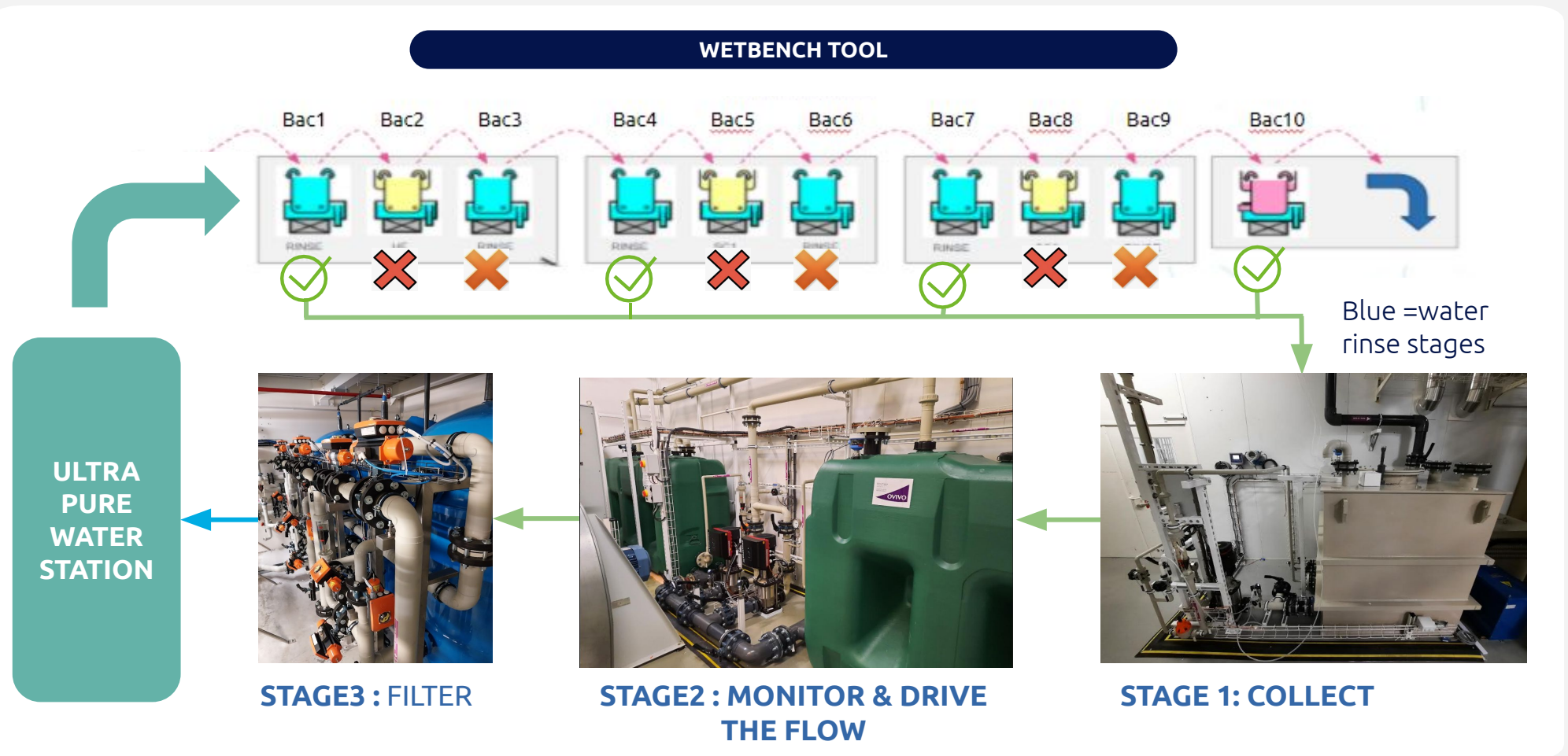
OBJECTIVE

~ 20% RECYCLE APPROXIMATELY OF THE FAB WATER DEMAND WITH THIS SYSTEM

REUSE OF THE WAFER RINSE WATER: 1ST TIME IN EUROPE



REUSE OF THE WAFER RINSE WATER: 1ST TIME IN EUROPE



After 18 months of waste water quality monitoring, this project enables to save up to 20% of total site consumption water

SECTION 04

TAKE AWAY





KEY TAKEAWAY

OUR CORPORATE PURPOSE

Soitec is focusing on designing and manufacturing products for a more sustainable future



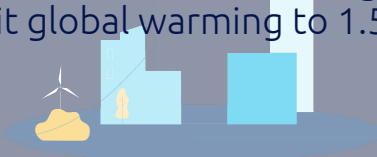
SUSTAINABLE INNOVATION

Environmental issues included in selection criteria at every stage of our product design and manufacturing process with the Greenovation project



CLIMATE

Ambitious action plan with short-term and mid-term targets to limit global warming to 1.5°C



WATER

Reduce, Reuse and Recycle approach in our fabs





THANK YOU

www.soitec.com

 /soitec

 /soitec

 @soitec_corporate



SOITEC PROPRIETARY

Any unauthorized reproduction, disclosure, or distribution of copies by any person of any portion of this work may be a violation of Copyright Laws, could result in the awarding of Damages for infringement, and may result in further civil and criminal penalties.

Exclusive property of Soitec. This document contains restricted information: disclosure, redisclosure, dissemination, redissemination, reproduction or use is limited to persons within Soitec and third parties which receive this document with a need to know only. Use or reuse, in whole or in part, for any purpose other than which expressly set forth in this document is forbidden.

All rights reserved. Copyright ©2022 SOITEC.

SOITEC PROPRIETARY

Any unauthorized reproduction, disclosure, or distribution of copies by any person of any portion of this work may be a violation of Copyright Laws, could result in the awarding of Damages for infringement, and may result in further civil and criminal penalties.

All rights reserved. Copyright ©2022 SOITEC.