

Kenya

SEURECA  VEOLIA

Transitioning towards a more sustainable economy and a positive footprint

24th September

 VEOLIA

Index

1

Veolia
presentation

2

Seureca

3

The MPV
Norfund/Veolia

4

Use cases

5

Methodology

6

Open
Discussions



We live in a

VEOLIA GROUP GLOBAL OVERVIEW



170 years
Supporting municipalities &
industries

~ 230 000
employees



58 countries
on 5 continents



45 Bn€
Revenue in 2022

3 MAIN BUSINESSES

1



WATER

- 111** million people supplied with drinking water
- 97** million people connected to wastewater systems
- 4,130** drinking water production plants managed
- 3,506** wastewater treatment plants managed

41%

2



WASTE

- 46** million people provided with collection services on behalf of municipalities
- 61** million metric tons of treated waste
- 533,759** business clients
- 823** waste processing facilities operated

32%

3



ENERGY

- 44** TWh produced
- 46,922** thermal installations managed
- 680** heating and cooling networks managed
- 2,716** industrial sites managed

27%

% of 2023 rev.

Accelerate innovation with GreenUp

Prepare tomorrow's growth

DECARBONIZE



To decarbonize our assets and those of our clients while **finding value in biogenic carbon**

- > Carbon capture and use: Sustainable aviation fuel, methanol...
- > Carbon capture and sequestration (biochar etc)
- > 5th generation of heating networks using biomass, heat recovery, geothermal...

REGENERATE



To become a major player in the recycling of **strategic metals**, in **advanced plastic recycling** and in the recovery of organic matter

- > Electric battery recycling
- > Recycling of new plastics resins and strategic metals
- > Recovery of organic matter

DEPOLLUTE



To remain the world leader in the **integrated management of water resources** and the treatment of **new pollutants**

- > Microplastics, micropollutants, etc.
- > PFAS in water, soil, and waste

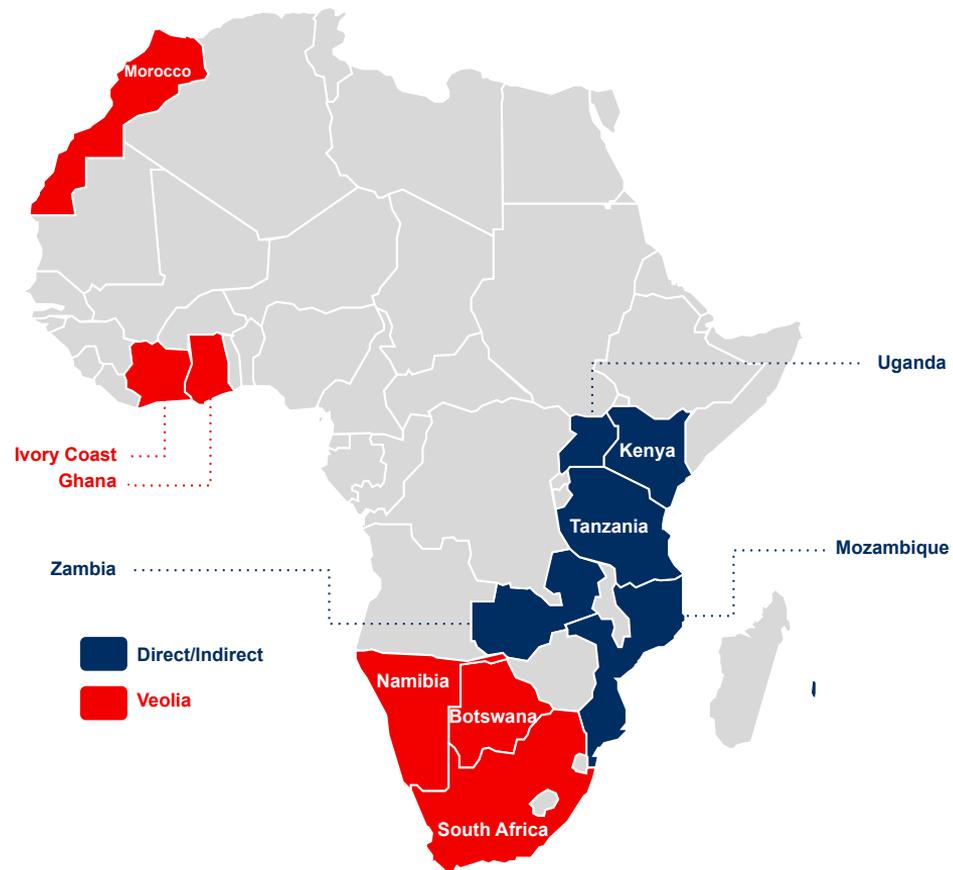
AI & DIGITAL



To differentiate ourselves with digital solutions onboarding **AI + Generative AI**

- > Leveraging AI and Gen AI to enhance performance. 6 POC launched on predictive maintenance, leak detection, energy efficiency, recycling quality...
- > Increase customers and employees satisfaction

Our presence in Africa



South Africa



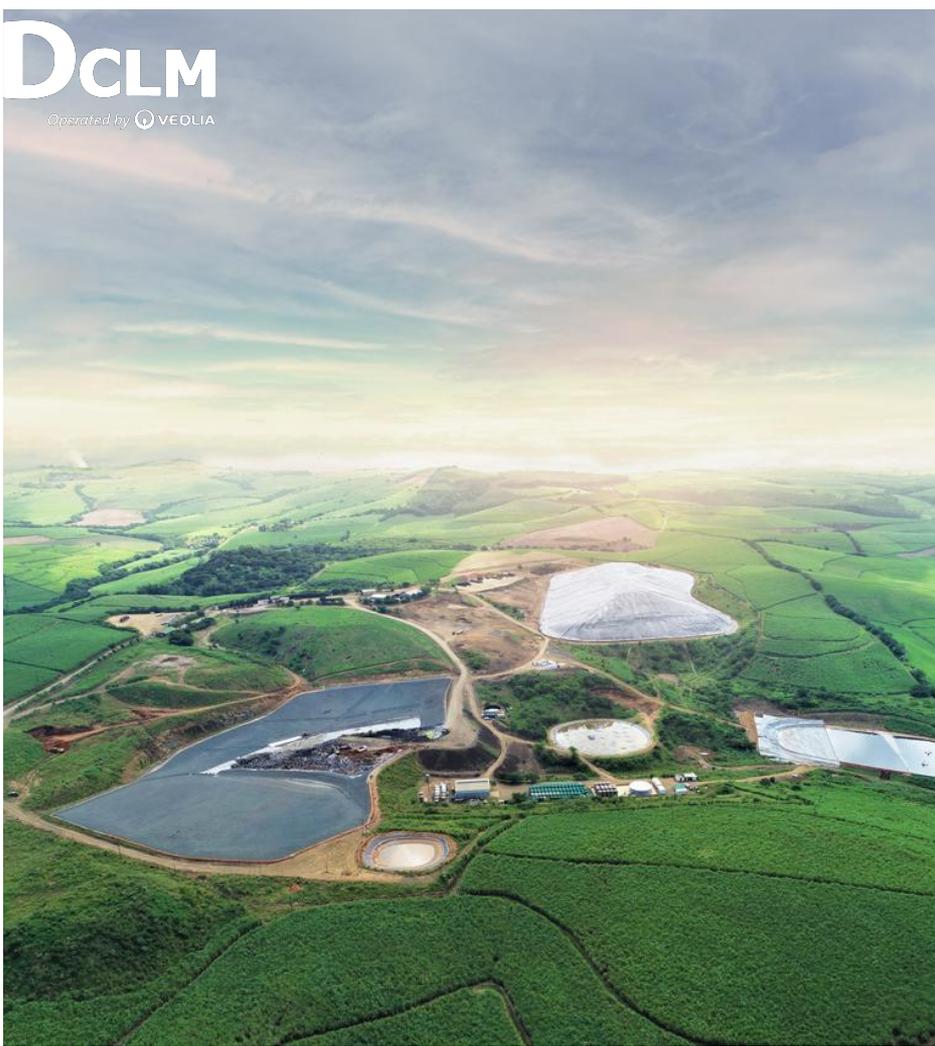
- Food and Beverage
- Mining
- Pulp and Paper
- Life Sciences
- Energy and Chemicals
- Primary Metals
- Industrial Parks

Inland (Gauteng, Mpumalanga)
Number of employees : 121
Key Contracts : **Harmony Gold, Samancor, Evander, Loreal**

KZN
Number of employees : 156 (86 in DCLM)
Key Contracts : **Durban Water Reuse, Mondi, Coca Cola, Toyota**

WC
Number of employees : 114 (60 in Overstrand)
Key Contracts : **Overstrand (entire region), Heineken**

EC
Number of employees : 8
Key Contracts : **Woodlands Dairy, Aspen Pharma**



Landfill of 144 ha

We offer to industries sustainable solutions for the management of liquid and/or hazardous waste treatment.

CERTIFICATIONS / AFFILIATIONS



2. Namibia - Main activity Presentation



Direct Potable Reuse at Wingoc - **Windhoek Goreangab Operating Company**

The City of Windhoek awarded the Wingoc a O&M contract for the New Goreangab Water Reclamation Plant.

Veolia is the majority shareholder of Wingoc with 67% of the shares and Wabag is the second shareholder with 33%.

Client: City of Windhoek (CoW)

Contract type: O&M

Capacity: 21,000 m³/d

Veolia and Norfund, your partner for ecological transformation

YOUR ECOLOGICAL CHALLENGES



in
Water



and/or
Energy



and/or
Waste

OUR ONE-STOP SHOP SOLUTION

Design
Finance
Build

Operate & Maintain

(3M USD <CAPEX< 50M USD)



RO, UF, Anaerobic digester,
Reuse plant, ZLD, WWTP, ...



Decarbonization and Energy Efficiency
Solutions (biogas, bioenergy, heat
pumps, chillers, solar PV, ...)



Waste-to-X, valorisation, biogas,
compost, ...

OUR GUARANTEES FOR YOU

Availability

Efficiency

Quality

Performance

CO2 reduction

Water Production

Energy production

Seureca In a Nutshell

Seureca is the **Consulting Engineering and Strategic & Operational Assistance Division** of Veolia, the global leader in services to the environment with 160 years history.

Seureca assists its clients to design and implement solutions to today's environmental challenges in the fields of **Water, Energy and Solid Waste** in the industrial, municipal and tertiary sectors. **From initial concept through to the execution and operation of solutions, the services includes a wide range of technical, environmental, organisational, strategic and operational studies and assistance.**



Resources and organization



An operational team
of more than
> 300
30% in France
70% abroad



Mobilization of
expertise for the
Veolia Group



Headquartered in Paris
16 international offices
3 speciality brands :
EPAS (Belgium),
DESL (India),
SEURECA LATAM (Brazil)



Seureca East Africa

Ecological transformation, that is our purpose.

Seureca has
64 years
of environmental expertise

€ 39 M

of turnover worldwide

Active in over

75 countries



WATER
~75%



WASTE
~19%



ENERGY
~6%

1/3 of activity is linked to the
Veolia Group

*2022 figures

Simplified Organisation Chart

SEURECA



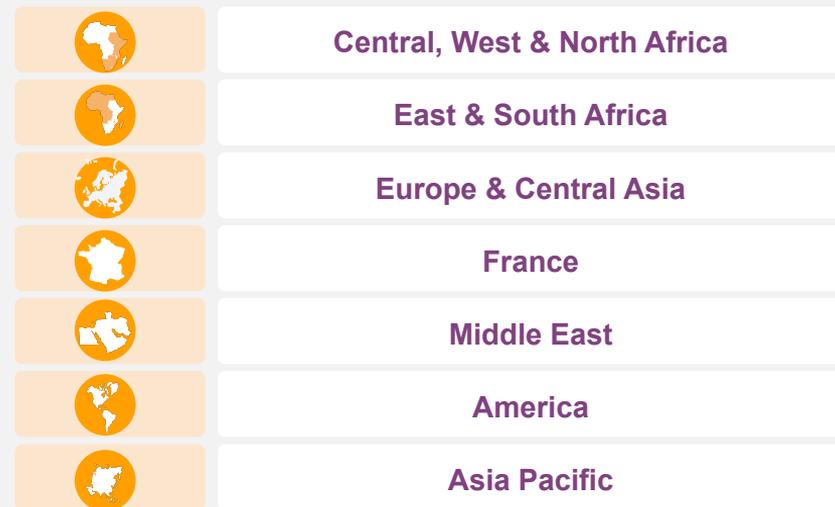
SECTORS



ACTIVITIES



ZONES



OUR EXPERTISE: FROM THE FEASIBILITY OF A PROJECT TO ITS OPERATIONAL PERFORMANCE



GENERAL STUDIES

- Master plans
- Feasibility studies
- Demand forecasting
- Resource management
- Technical audits
- Technical modeling
- Optimization studies
- Investment definition and planning
- Socio-economic and tariff studies
- Environmental and regulatory studies



DESIGN AND WORKS SUPERVISION

- Assistance to works management
- Preliminary design
- Detailed design
- Preparation of tender documents
- Assistance in the procurement process
- Work supervision
- Works inception
- Commissioning assistance
- Follow-up on the guarantee period



STRATEGIC AND OPERATIONAL ASSISTANCE

- Organizational and institutional audits
- Strategic plans and financial models
- Asset management and risk analysis
- Asset and client management
- Metering and loss reduction
- Energy performance improvement
- Maintenance optimization
- Environmental performance
- Information systems
- Digital transformation
- Change management
- Training and skills transfer

OUR SPECIALTY SUBSIDIARIES



20 years of experience

ISO 9001: 2015 Certification

Accreditation level 1 ESCO (BEE)

DESL accompanies its clients, largely industries and the tertiary sector, in the development of energy efficiency and renewable energy projects.

The services provided by DESL cover biomass, industrial cogeneration and trigeneration, heat recovery, and waste-to-energy conversion.

[To find out more](#)



30 years of experience

BELAC accreditation for ISO 17025

2016 Award for the FrogBox

Seureca Industrial Water Services specializes in industrial water treatment, process water treatment, and technical assistance to industries.

The company has developed its own state-of-the-art laboratory in Ghent, Belgium, where all standard and advanced wastewater purification techniques are tested. It carries out pilot projects on site as well.

[To find out more](#)



20 years of experience

Seureca Latam provides their assistance to water companies. The expertise of NG Infra is widely known across the Brazilian market.

The company has already developed and implemented its own software for non-revenue water management, named SISPER.

[To find out more](#)

Seureca Underpins the GROUP's Business Development

Seureca paves the way for the Veolia Group
in new countries and with new clients



**Upstream
commercial presence**

**Direct assistance to
business development**



Audits, due diligence, technical offer preparation
(project management and/or technical components),
OPEX-CAPEX estimates and models, Tender Box

Seureca shares the **project risk** with **Veolia** →
Seureca is a **partner of the Veolia Business
Unit**, and can assist in developing new business
and contractual models



Co-production

Seureca in East and Southern Africa

Key Figures



Eastern and Southern Africa Area

21



Countries covered

10

Countries where we work

- Kenya
- Eswatini
- Malawi
- Uganda
- Botswana
- Mozambique
- Tanzania
- Zambia
- Ethiopia
- South Africa

>35



Years of presence

35



Employees

- Kenya: 28
- Tanzania: 5

5



Nationalities

3



Seureca Offices

- Seureca East Africa Limited (SEAL / Kenya)
- Seureca Tanzania
- Seureca Eswatini

~6.8M
EUR



Average annual turnover in 2023

~15



Running projects

3



Business areas

- Water / Wastewater
- Solid Waste
- Energy

3



Types of Clients

- Industrial
- Municipal / Developers
- Strategic Consultants

Feasibility Study of Establishment of a waste to Energy Power Plant

Nairobi, KENYA



2021

2022

230,000 €

3,000 tons / day solid waste

Power Produced 45 MW

CONTEXT

The city of Nairobi generates about 3,000 tonnes of solid waste per day and is transported to the main landfill at Dandora within Nairobi. The County and KenGen would like to exploit this resource for the benefit of the people. KenGen would like to further diversify its modes of power generation to increase the security of supply.

KenGen has been granted approval by the National Government of Kenya to carry out a Feasibility Study for a Waste to Energy Plant Project within Nairobi City County.

PROJECT ACTIVITIES

- To estimate and project the amount of solid waste (fuel) available for power generation
- To assess the waste composition and calorific value
- To undertake economic and financial evaluations of the project
- To assess, quantify and include the benefits of the by-products arising from the process of converting waste to electricity
- To carry out an ESIA for the proposed project and submit to NEMA for approval and issuance of Environmental licence



- Additional energy source for Kengen
- Reduction of soil pollution
- Reduction of respiratory disorders and other diseases for the population living close by.
- Reduction of the volume of waste to be stored

Kipkarren Dam Treatment Works and Associated Pipelines Water Project

Eldoret, KENYA



1,425,000 €
38 man months



24 000 m3/d
300 000 inhab.
52km distribution network

CONTEXT

The town of Eldoret has grown rapidly and some neighbourhoods have been excluded from the water supply area. To accommodate the growth of Eldoret and its population, the Central Rift Valley Water Works Development Agency, with funding from the AfDB, decided to build a new water supply system to serve some new urban areas. The water will be taken from an existing dam, the Kipkarren Dam. The beneficiary agency is North Rift Valley Water Works Development Agency.



PROJECT ACTIVITIES

- Review and update of previous detailed design
- Preparation and implementation of the Resettlement Action Plan (RAP) to ensure no negative social impact on the population
- Preparation of the Tender Documents
- Assisting the Client in the selection of the Contractor
- Construction supervision

As an International Consulting Firm, Seureca has an extensive experience in implementing similar projects all over the world and use the current best practices. For instance, the document management which is a key success factor is carried out through a cloud-based solution enabling a smooth communication between the various stakeholders.



- A new 595m, 600mm diameter steel gravity Raw Water Main from the dam to a new treatment works;
- A new treatment works of capacity 24,375m3/d with space provided for expansion to 32,500m3/d
- A new 13.75km, 600mm diameter steel rising main from the new treatment works to a new storage tank
- A new 10,000m3 ground storage tank

Technical assistance NRW Management Kisumu, KENYA



1,527,000 €



47,000 customers

CONTEXT

In Kenya, most of the Water & Sanitation utilities face major challenges related to high levels of Non-Revenue Water (NRW). NRW is caused by physical and commercial losses and reduce substantially the utilities' income.

LVWWDA has commissioned the JV of Seureca East Africa Limited, Seureca Veolia and International Office for Water (OIEAU) to carry out the Technical Assistance for NRW Management and improvement of Water services in informal settlements.

PROJECT ACTIVITIES

- Identification of the needs in terms on NRW Management and improvement of water and sanitation services in Low Income Areas
- Definition of Action Plans for NRW
- Support to KIWASCO in purchasing equipment dedicated to NRW Management
- Provision of Technical Assistance, Training and Capacity Building in implementing the Action Plan
- Assistance in Reduction of NRW and update of the Action Plan
- Improvement of water and sanitation services in Low Income Areas; (including design and supervision of 20 VIP toilets, 5 ablution blocks, 3 septage transfer stations)



- Initial NRW Level 47%
- Target NRW level 20%
- Reduction of physical losses and therefore reduced hydric stress.



Veolia in Ghana

Veolia in Ghana

Both global and local

70% Veolia
& 30% CH Group (100% Ghanaian)



168 employees

for 2 sites

Objective to become a leader in industrial services

Obuasi gold mine Operation & Maintenance of water plants

Scope: Operation & Maintenance of 4 wastewater treatment plants to be compliant on discharge with local EPA and 2 drinking water treatment plants since Apr. 2019

Capacity: ~40 000 m³/day of wastewater and ~7 000 m³/day of drinking water



Bogoso gold mine Operation & Maintenance of water plant

Scope: Operation & Maintenance of the wastewater treatment plant since Aug. 2022 to be compliant on discharge with local EPA

Capacity: ~12 000 m³/day



Veolia in Ivory coast

Veolia in Ivory Coast

Both global and local

Through a strong partnership with PFO Africa



148 employees

for 4 sites

Objective to become a leader in collective services O&M

especially in access to water

Design, Build, Operation & Maintenance of drinking water plants

- Scope: Design, Build, Operate and Maintain of 3 drinking water treatment plant in Abidjan, Bouaké and San Pedro
- Capacity: Treatment capacity from 18 000, 60 000 and 240 000 m³/day



Rehabilitation of old dumpsite of Akouedo

- Scope: Design and Build of a leachate treatment plant and biogaz valorisation system on a 60 y old dumpsite - To be followed by a long term O&M contract TBD
- Capacity: 80 000 m³/year of leachate and production of 1 -2 MWh electricity



Veolia and Norfund, your partner for ecological transformation

YOUR ECOLOGICAL CHALLENGES



in
Water



and/or
Energy



and/or
Waste

OUR ONE-STOP SHOP SOLUTION

Design
Finance
Build
Operate & Maintain

(3M USD <CAPEX< 50M USD)



RO, UF, Anaerobic digester,
Reuse plant, ZLD, WWTP, ...



Decarbonization and Energy Efficiency
Solutions (biogas, bioenergy, heat
pumps, chillers, solar PV, ...)



Waste-to-X, valorisation, biogas,
compost, ...

OUR GUARANTEES FOR YOU

Availability

Efficiency

Quality

Performance

CO2 reduction

Water Production

Energy production

VEOLIA NORFUND PLATFORM

 **VEOLIA**  Norfund

WORKING IN PARTNERSHIP

Norfund at glance

Empowering Sustainable Development through Strategic Investments

Our goals



Create jobs and improve lives by investing in businesses that drive sustainable development



Invest in the transition to net zero in emerging markets

Our investments areas



Renewable energy



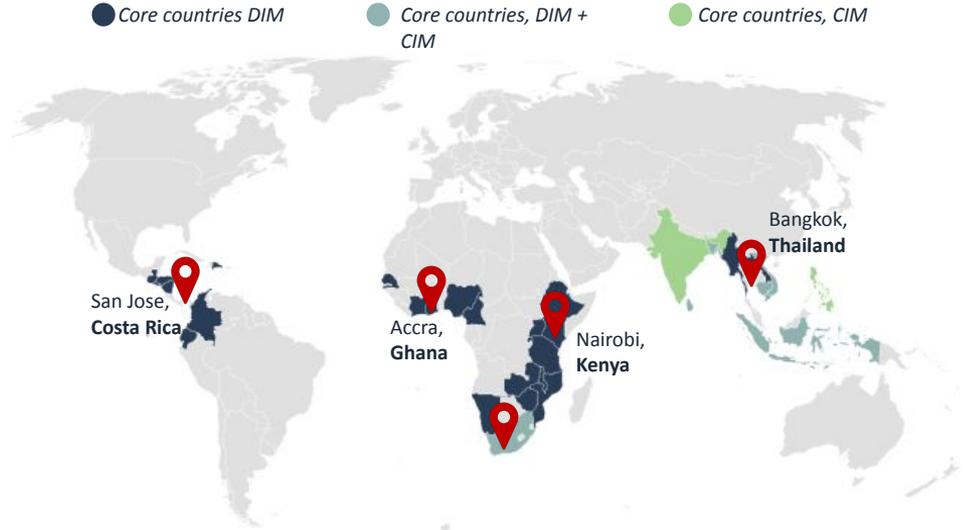
Financial Inclusion



Scalable Enterprises



Green Infrastructure



2.9
bEUR portfolio

121
Employees (FTE)

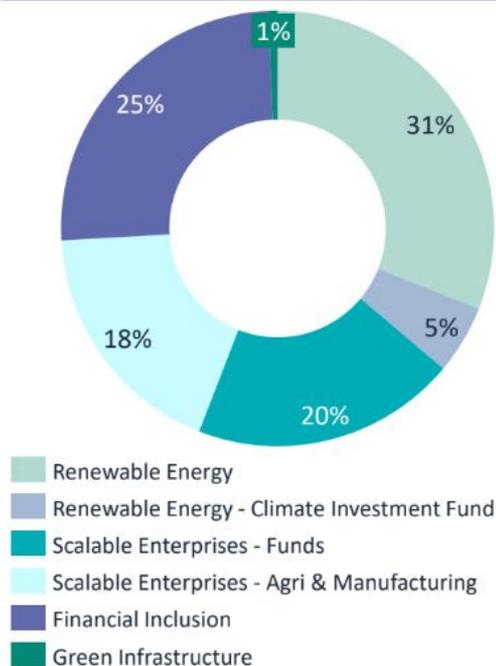
24
Nationalities

Note: As of Q2 2023; DIM = Development Investment Mandate; CIM = Climate Investment Mandate

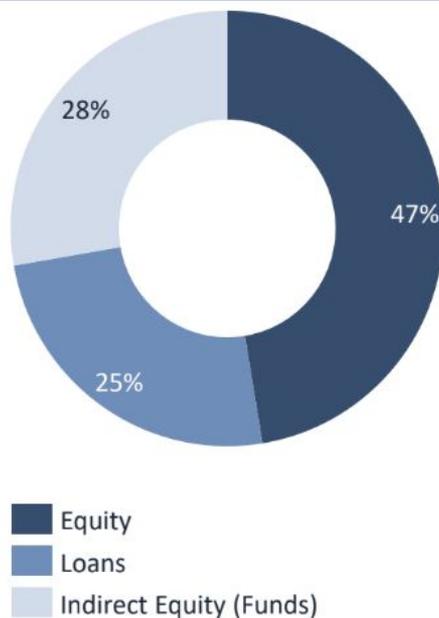
The African continent is Norfunds most important investment region with more than 60% of total portfolio invested on the continent

100% = NOK 22.9 billion (2.1 bUSD)

Investment area



Instrument



Top 10 countries

Country	Committed Portfolio (NOK)	Committed Portfolio in percent
South Africa	3,289,748	14.4%
Kenya	3,274,655	14.3%
Uganda	2,190,285	9.6%
Zambia	2,103,547	9.2%
Tanzania	1,767,573	7.7%
Ivory Coast	1,672,148	7.3%
Nigeria	1,574,874	6.9%
Ghana	1,318,397	5.8%
Mozambique	888,038	3.9%
Cameroon	464,853	2.0%

Note: As of Q1 2024



VEOLIA NORFUND PLATFORM

FUNDED SOLUTIONS TO DECARBONIZE YOUR UTILITIES

Turn Key Solution Platform for the industries all over Africa

- **Fully Funded Projects** by the Veolia-Norfund Platform
- Veolia and partners execute the works, manages plant operation and maintenance
- **We offer a guaranteed outcome, rather than a product**
- service through **unit-based rent** or fixed fee with variable usage charges

Benefits for our clients

- **Focus on core business activities**
- Maximizes utilities services performance
- Access to global-leading expertise whilst providing a locally customized solution
- Free cash flow to invest in core (industrial) process – as opposed to utilities / ancillaries / or treatment



A FEW KEY BUSINESS CASES

Business cases

WATER REUSE





Woodlands Dairy

Anaerobic Resource Recovery Facility

Eastern Cape, South Africa

Contract Type: Design and Build,, Operation and Maintenance

Feed Rate: 1 500 m3/Day

Contract Duration: 2013 - Ongoing

95 % Removal of Effluent COD

| Challenge

The municipality could not supply the dairy processing facility with sufficient water, and the factory could not expand

| Solution

- Veolia design, build and operates a resource recovery plant
- Up to **60% of water used by the factory is recycled**
- **Biogas is generated** which is used for steam production

| Benefits



Reduced operating costs: Estimated **10M ZAR savings per year**



Maximising productive uptime: Support plant expansion and guaranteed asset uptime to support production.



Environmental footprint: Showcase for sustainability; Water footprint reduction incentives



FrieslandCampina

*Food & Beverage (Dairy)
Aalter, Belgium*

| Challenge

- FrieslandCampina, **one of the largest dairy in the world**, wanted to **increase the production capacity by 50%**, while **reducing their water consumption at the same time**.
- Need for a new efficient and reliable water treatment system

| Solution

FrieslandCampina chose Veolia to **design, build and operate a unique system** that would address those issues with three major projects:

- Design & Build Wastewater and Reuse Solution
- Operate & Maintain since 2015, and successfully renewed in 2022

| Benefits



Reduced operating costs: Estimated **2M€ savings per year**



Guaranteed

productive

uptime:



Health & Safety: Reduced risk relative to water withdrawal.



Environmental footprint: Showcase for sustainability; Water footprint reduction incentives.



Business cases

**COMBINED HEAT
AND POWER (CHP)**





Nestlé: CHP

Food & Beverage,
Avaça, Portugal

*Dairy – Powdered milk
and infant cereals
Over 37 000 tons of cereals / year*

| Challenge

- The main Nestlé plant in Portugal was looking for solutions to improve energy and environmental efficiency while reducing energy costs,
- considering the importance and intensity of energy for the range of products manufactured in Avaça, mostly powdered milk and cereals (Chocapic, Nestum, Cerelac etc.).

| Solution

- Design, Build, Finance and Operate a 4.2 MW Co-Generation plant (32 GWh per year)
- 15 ton steam/hour
- 10 year fully funded and operated plant

| Benefits



Reduced Overall Energy Cost for the client



Guaranteed Maximise Productive Uptime



Environmental Footprint: 5,000 tons of CO₂ avoided annually.



Optimized cashflow: No investment in solution financed by Veolia.



Business cases

**SWITCH LOW
CARBON FUEL**





RENAULT: The first Zero Carbon plant with ZLD + Biomass & energy recovery

Automotive
Tangier, Morocco

Car Plant
200,000 cars /y

Veolia scope
Operation start: 2011 - 8 years
Design Build Operate
Biomass power plants 18MW
Zero Liquid Discharge plant

| Challenge

- Renault is a French multinational manufacturer of automobiles
- The client established a greenfield car manufacturing plant in Tangier. It was looking for a partner for the first zero Carbon plant.

| Solution

- Veolia **design, build and operate a production unit on the site in 2012 with three biomass boilers** with a combined thermal power of 18MW - designed to cover 100% of the plant's thermal needs.
- **The biomass plants are fueled by local olive pits.**
- Veolia **designed, built, and operates a water recycling process** with zero wastewater discharge and worked with Renault to optimize its industrial process to reduce water uses.

| Benefits:



Reduce Total Cost of Ownership



Environmental Footprint: the water recycling and energy savings measures make it a carbon-neutral and zero industrial liquid discharge plant (**135,000 CO₂ tons/year avoided, 70% decrease of water intake**).



Best in Class Technology: state-of-the-art technology for the biomass and Zero Liquid Discharge .

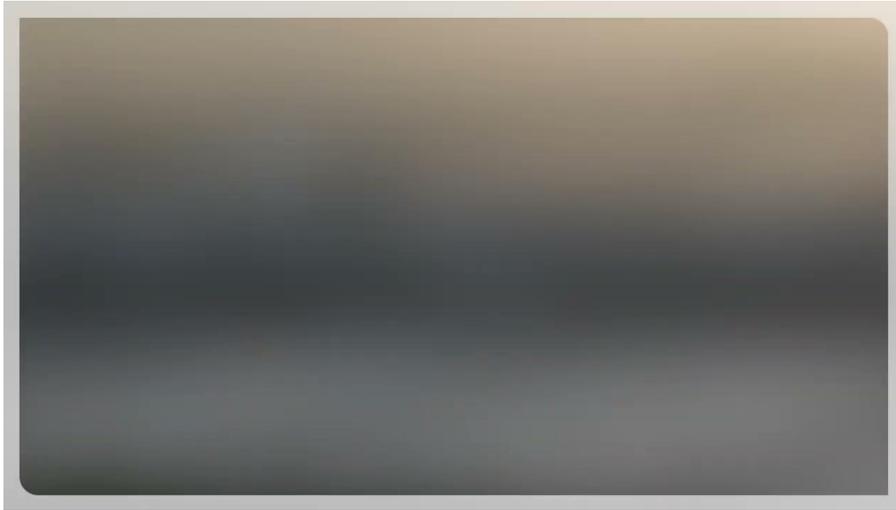


Employee Absorption & Development: training from Veolia experts to develop local skills.



Expertise - Circular Economy

In Bundling Activities (waste, water and / or energy)



Renault
Morocco

First Zero CO₂ and Zero Liquid Discharge Automotive Plant



Partnering since greenfield stage

Design Build Operate Maintain three
6 MW biomass boilers and water
recycling process



Veolia experts trained employees
to develop local skills



- 135 000
t/yr CO₂



70% less
water intake

Business case in waste to energy





Energy Efficiency and Waste Recovery, Findus

Food & Beverage,
Bjuv, Sweden

Fruit jelly manufacturing

Frozen products and grocery products

Veolia scope

Operation & Maintenance of utilities, building, HVAC-installations and incentive on resource efficiency and reduced emissions

Contract: 2013 - 2017

Challenge

- Findus Sverige AB is one of the country's leading food companies, with over 200 frozen products and 50 grocery products in the range. The company had around 800 employees and sales of around 2.5 billion SEK. Findus production facility and headquarters were in Bjuv in Skåne in the southern part of Sweden

Solution

- Veolia developed and optimized the operation and maintenance of buildings, technical installations and internal media- and energy supply systems at Findus production facility in Bjuv
- Veolia took over the responsibility for Findus internal functions and staff, in these service areas based on an improvement plan with an objective to accelerate Findus energy efficiency efforts using solutions such as heat pump & real time monitoring.

Benefits



Reduce Operating Costs: 10% guaranteed costs reduction within operations and maintenance through productivity gains and cooperation within purchasing; 0.6 M€ annual savings



Ensure access to sustainable resources: 79% of the energy supply based on fossil based on excess heat



Environmental footprint : 53% reduction of CO₂ emissions



Methodology

VEOLIA INDUSTRY SERVICES

PARTNER OF UTILITIES ECOLOGICAL TRANSFORMATION



IF YOU HAVE PROJECTS

Equipment renewal
Capacity increase
Combined Heat and Power (CHP)
Fuel switch (Elec, gas, biomass)
Waste heat recovery
By products heat valorization
Solar PV

Design
Finance
Build
Operate & Maintain
(3M€<CAPEX<50M€)



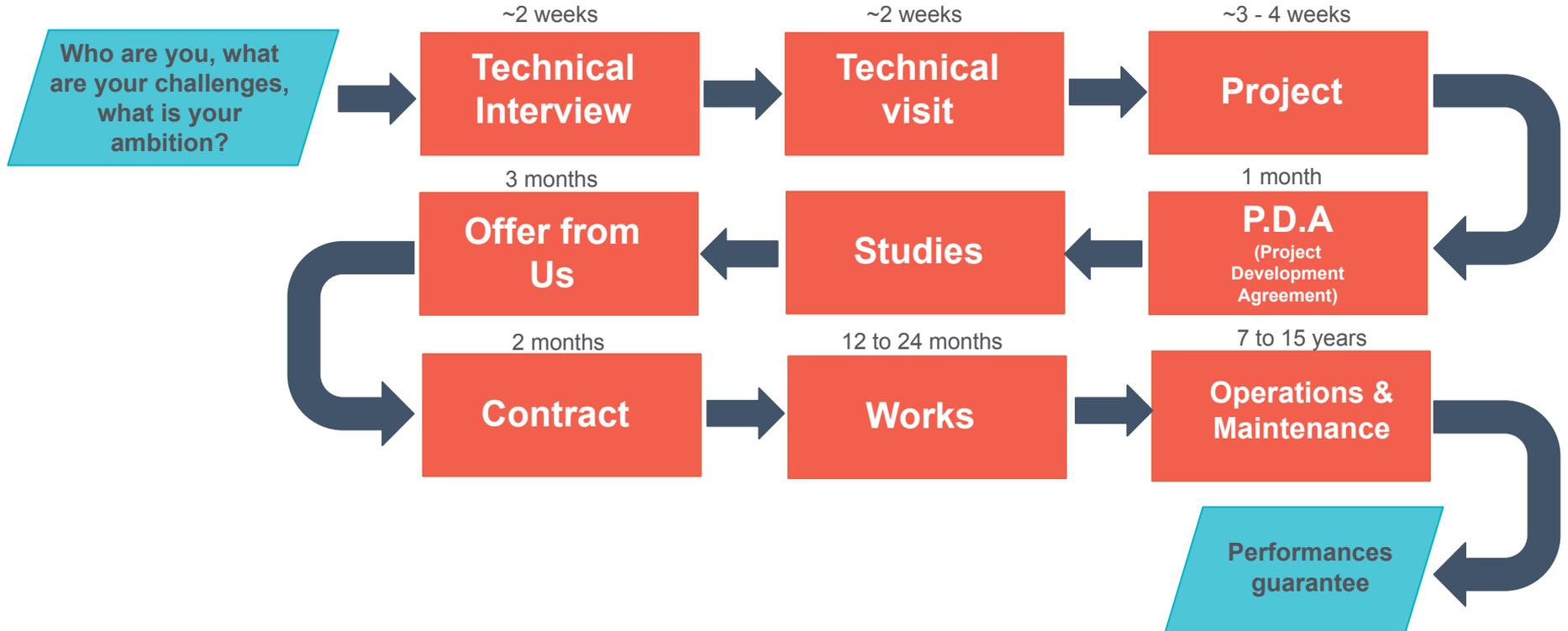
Boilers, heat pumps, chillers, gas engines, gas turbines, solar PV.
Energy Management, comp. Air, vacuum, cooling towers.

VEOLIA'S GUARANTEES

Availability
Efficiency
Operation costs
Maintenance costs
CO2 reduction
Water reduction
Energy produced (Volumes)

Project development Methodology

Long term partnership



Do you have projects ?



Water Supply

Wastewater

Reuse Water

Equipment renewal

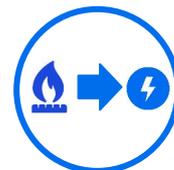
CHP

Fuel switch

Waste heat recovery

By product to energy

Solar PV



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