

#### THE COMPANY

Since 1996, EcoBIRD is a leader in the development and implementation of Nature Based Solutions. Our technical expertise associated to intensive R&D efforts bring us to constantly conceive, validate and offer innovative and site-specific solutions to turn private companies', communities', public authorities' and institutions' untreated effluent issues into resources.

Our team of engineers, researchers and technicians in water and wastewater treatment process, in ecological

and biological process engineering as well as in automation has built a prominent transdisciplinary expertise in the development, adaptation and management of effective, reliable, robust, resilient, sustainable and cost-efficient technical, managerial and economic solutions. Our knowhow, supported by more than 2000 references in France and abroad, enables us to offer complete service packages tailored to our customers' needs.



#### **OUR BELIEFS, OFFER AND SERVICES**

At EcoBIRD, we believe that nature's ability to recycle resources and nutrients can be improved and turned into solutions to meet the challenges posed by humanity's impact on the planet. Natural systems being extremely complex, we believe that only intense R&D can produce sound and reliable engineered solutions. Finally, we are convinced that beyond benefiting our customers and partners, our solutions have to integrate in both the local and global contexts and have to provide environmental, social and economic benefits.

We offer custom-built services ranging from projectconsortium construction, support to the redaction of technical bids (process parts), solution specification and design, construction planning and supervision but also to regulatory, financial and managerial support to ensure project success. We also have built the capacity to lead, manage and support R&D projects to design and install pilots for the development, optimisation, and validation of site-specific solutions. To support our projects, we have our own expert in-house automation and programming department to create custom-made solution for the remote monitoring and operation of treatment systems. EcoBIRD's versatile/adaptative monitoring and operation solutions, can be implemented on dedicated as well as on existing platforms.





#### **DEVELOPMENT DIRECTIONS for a SUSTAINABLE DEVELOPMENT**

We aim at promoting holistic/global solutions that are site-appropriate, technically relevant, cost-efficient and sustainable to answer both current and future challenges. Our development is focussed on the following areas:

- Wastewater REUSE and cost efficient solutions combined with nature based solutions
- Micropollutant fate and removal within stormwater treatment facilities (NBS)
  - nent facilities (NDS)

### COMPANY STRUCTURE and REFERENCES

# Project Management and Coordination

Fabien CLEMENT

Project Management and Monitoring / Support and Technical Assistance Project costing CAPEX / OPEX, NPV

### **Research & Development**

Stéphane TROESCH

#### Engineering

Jacques ROCHEREAU / Ludovic MILLE

Engineering Studies and Consultancy Process Engineering Automation and Programming <u>Drawings</u> etailed desgin drawings, Modelling, 3D drawings, Electric Diagrams. Information Panels

- Decentralized approaches for urban and peri urban sanitation
- Sponge cities and Nature Based solutions
  - Technical evaluation: <u>Wastewater Treatment Solutions</u> (ONEE Maroc) Critical analysis for sanitation strategies in rural areas
  - Design Execution: 4000 PE <u>WWTP</u> for the Palestinian Water Authority (Misilya) – Funding A.F.D.
  - Diagnosis: WWTP for <u>Industrial Effluent</u> Company COUDENE (FR - 30)
  - Feasibility study: treatment of <u>Industrial Effluents</u> -Company SEYFERT (FR - 42).
  - Design-Execution: 11 000 m<sup>3</sup>/yr. <u>Sludge/septage</u> treatment plant - Nègrepelisse (FR - 81)
  - Preliminary design: 600m³/d <u>Sludge/Septage</u> treatment plant - Africa
  - Technical Assessment: constructed wetlands for <u>De-Icing</u> <u>Agent</u> treatment - Paris airport (FR - 95)
  - Design Execution: real-scale demonstrator for <u>Combined</u> <u>Sewer Overflow</u> - Grand Lyon Metropolis (FR – 69)

# **OUR OFFER**

#### **Research and Development**

- Development of new NBS configuration for emergent pollutants, specific wastewater,...
- Development of site- and effluent-specific alternative and innovative treatment solutions
- Resources recovery and valorisation
- Feasibility and validation studies through onsite pilot testing

# **Economic Analysis**

- Capital expenditures CAPEX
- Operational costs assessments OPEX
- Specification and assessment of solutions'
- partial or total rehabilitation/reconstruction
- Processes analysis and comparison

# Consultancy and support

- Technical advice for, wastewater management, Treatment and Reuse For industrial customers, from project definition to project delivery
  - Administrative and regulatory compliance
  - echnical support of works/construction companies
    - dect Management and Monitoring / Worksite Management Tools

# Process

# Engineering

- Feasibility studies
- Diagnostic of treatment solutions
- Technical drawings: conceptual, preliminary, final and as-built design, operating plan, etc.
- Development of specific treatment chains – process combination, etc.

# www.ecobird.fr