Orege Business Update Presentation June 2022

### Maintenant vos boues ont de la valeur



## Macro evolutions since the end of 2021

- Pandemic related constraints have nearly all been lifted.
  3 projects signed and still frozen since the start of the pandemic should be able to resume and be executed in 2022.
- 2. Sale of Orege solutions has once again become the favoured "business model" and the short term rentals are now only occasional and opportunistic.
- 3. The partnership with Alfa Laval is being strengthened:
  - distribution of our SLG-F solutions (thickening)
  - joint development of a combined solution for dewatering in the US this summer
  - manufacturing of SLG skids for the US market in Houston

The terms of these new areas are under discussion.

## Macro evolutions since the end of 2021

- 4. The commercial strategy focussed on the UK and the US for the last 2 to 3 years will bear fruit this year and will enable Orege to resume its development in Germany, Switzerland, Italy and Japan.
- 5. Improving the carbon footprint and the ESG approach are now the main motivations for purchasing Orege solutions for many of our customers, particularly in the UK and Europe.
- 6. The context of the global energy crisis, where the prices of gas and electricity are soaring, represents an opportunity for certain Orege solutions. Several significant projects intended to "boost" the production of biogas from anaerobic digesters in wastewater treatment plants are under discussion, notably in the UK.

## Macro evolutions since the end of 2021

7. Disrupted supply chains - conflict between Russia and Ukraine

Orege has stocks of solutions ready to be delivered to cover 2022 needs having launched the manufacture of a number of units from the end of 2021 in anticipation of growth in business.

In April 2022, Orège secured the manufacture of an additional number of solutions.

Thus, the Orege Group does not anticipate any significant constraint for its activity in 2022.

As a result of the global context, the Orège Group is rethinking its strategy for determining the selling prices of its solutions.

### **Summary figures**

- 2021 turnover  $\simeq$  2.3 Me (vs 2 Me for 2020)
- 2021 net loss of 4.6 Me (vs 7.4 Me for 2020)
- Further financing commitment (current account advance) from Eren Industries of 3.3 Me for 2022

## Orege & the Water Utilities in 2020/2021/2022



## Main Bizdev developments in the UK since the end of 2021

- The start of large-scale adoption of the technology developed by Orege and of our productsand solutions initiated by Scottish Water (9 solutions purchased and deployed). Other Water Utilities are expected to follow suit in 2022.
- 2. Purchasing decisions driven by "CSR" and "boost" of biogas production (renewable energy) criteria more and more frequent and with a new degree of urgency.
- 3. Orege technology and SLG and SLG-F solutions are being adopted by several Water Utilities intheir "asset standards" (essential step for widescale adoption of an innovative technology).
- 4. A recent and growing interest of "tier 1 contractors" for our technology and our SLG/SLG-Fproducts and solutions for rehabilitation, expansion and construction projects of sludgeworkshops.

### SCOTTISH WATER



- Manages the entire water cycle in Scotland, i.e. for approximately 3 million PE as part of a 6-year plan(starting 04/01/2021) under the supervision of the Scottish Parliament.
- With 1800 WWTPs, Scottish Water manages the largest number of WWTPs among the 12 UK WaterUtilities.
- A very strong and proactive environmental approach, particularly for:
  - Reducing transport of liquid sludge
  - Optimization of the efficiency of sludge digestion (biogas)
  - The protection of rivers, lakes and seas
- Sale of 9 SLG-F solutions over the last 18 months, including an order for 5 solutions representing 1.5 Me turnover, received in Q4-2021 (with the last 2 units delivered in Q1-2022).
- We anticipate many additional orders in 2022 and following years from different parts of Scottish Water:
  - WGM
    Scottish Water:

(tier 1 contractor)

- Regional managers
- "Net Zero" managers
- Asset "Optimisation" managers

## Projects in the USA-Situation mid-2022





#### Orege US team : 10 people

## 9 Projects sold and operated

- Two Rivers / New Jersey
- Gresham / Oregon
- CH2M / Allentown
- Orlando/Floride
- Forth Worth/Synagro
- Trinity Rivers/Texas
- GCUA / Pennsylvania
- Deland / Florida
- Mullins Cheese/ Wisconsin

#### **3 Projects under execution**

- La Crosse/Wisconsin
- Erving Industries/ Massachussets
  - Massachussets
  - Easley Combined
    - Utilities/South Carolina

#### Important pipeline, projects such as:

- Gulf Coast Authority/ Houston, TX
- PIMA County/ Tuscon, AZ
- City of S. San Francisco/ California

# More and more large-scale and high value added projects



 $\rightarrow$  Targets: Medium or large wastewater treatment plants (100,000 PE to over 1 million PE)

- $\rightarrow$  3 applications envisaged:
  - Thickening or "boost" of thickening
  - "Boost" of anaerobic digestion
  - "Boost" of dewatering

# More and more large-scale and high value added projects

- → Several Orege products or solutions for each application, often with greater capacity: 20m3/h to 120 m3/h (range under development), for the different zones: UK, Europe, US, Japan
- → A role of "integrating consultant" for the optimization of the entire sludge treatment and recovery workshop with two predominant criteria: CSR and financial savings
- → Projects often in the context of construction, expansion or rehabilitationStudies, orders and execution of these projects most often sequencedThe intervention of one or more consulting engineering companies becomes essential
- $\rightarrow$  Orege potential turnover per project: 1 Me to several Me
- → 6 projects corresponding to this definition are currently being demonstrated / discussed /negotiated (UK, Europe, US)

## New innovative Orege solutions, beginning commercialisation



## Orege solutions are part of a Corporate Social Responsibility approach

Orège solutions significantly improve the performance of the thickening, of anaerobic digestion and of dewatering and through to the drying of sludge in wastewater treatment plants.

The positive impacts on environmental and societal aspects are as follows:

### **Contribution to sustainable development goals**

- Reduction of the carbon footprint of the "sludge" sector
- Preservation of terrestrial and aquatic environments
- Facilitation of societal acceptance of the treatment and recovery of sludge
- Optimization of renewable energy production
- Preservation of resources and reduction of dependence on fossil fuels

## Orege solutions are part of a Corporate Social Responsibility approach

### **Optimization of the operation of the sludge treatment system**

- Optimization of the treatment capacity of equipment
- Reduction of time and associated costs for the operation of equipment
- Reduction in the volume of sludge to be transported
- Reduced consumption of reagents
- Improvement of the rheological and physicochemical characteristics of sludge allowing an optimization of agricultural recovery
- Improving the quality of and reusing the filtrate

#### **Optimization of the recovery of the sludge produced**

- Agronomic and landscape development
- Biogas/biomethane production
- Co-incineration (substitution for fossil fuels)

## Orege solutions are part of a Corporate Social Responsibility approach

Through its technologies and solutions, Orège contributes to the sustainable development goals established by the Member States of the United Nations.



Orege is offering to accompany its customers on the positive impact of SLG or SLG-F solutions on their CSR assessment.

## Orege, a Socially Responsible Investment

## **Appendices**

## Benefits of the solutions developed by Orege

Main benefits	Additional benefits	Benefits under development for sludge valorisation
Reduce thickened sludge and/or cake volume	Increase existing equipment treatment capacity	Improve the agricultural recovery of sludge: land application and composting
Reduce carbon footprint and GHG emission	Reduce odors and corrosive gas emissions	Improve anaerobic digestion performance (hydraulic retention time, biogas production)
Reduce polymer consumption	Reduce energy consumption	Develop energy recovery from sludge
Improve filtrate quality		
Improve rheology and pumpability of sludge	© Orège 2022- Strictly confidential – Présentation Juin 2022	

## Schematic of an anaerobic digestion line



## Thank you

