



Now your sludge is valuable

Presentation slides 16 June 2020

Positioning of SLG solutions in WWTPs



Orège has developped SLG solutions rather than equipment



Benefits of SLG solutions

Main advantages of the SLG solutions	Additional benefits of the SLG solutions	Sludge valorisation axes (applications being developed)
Reduce the volume of thickened and/or dewatered sludge	Improve the quality of the treatment filtrates	Improve the agricultural recovery of sludge: land application/spreading, composting and land filling
Increase in flowrate capacity	Reduce odors and corrosive gas emissions	Boost of biogas production
Lower polymer consumption	Improve viscosity and pumpability of sludge	Develop sludge energy recovery
Improve carbon footprint	Reduce energy consumption	

Bizdev strategy on targeted countries



Activity in Great-Britain

- An overall context in Great Britain clearer compared to H2 2019
 - Boris Johnson re-elected as Prime Minister with a majority
 - Government's unambiguous position vis-à-vis Brexit
- Most of the Water Utilities (7 out of 10 in England and Wales) have now found an agreement on their five-year AMP7 plans with the regulator OFWAT (among our customers only Anglian is still not in agreement)
 - Possibility to commit Capex since 04/2020
- Growing pressure on the Water Utilities from various key players (Government, OFWAT, consumers, global organizations, etc.) urging them to implement innovative technological solutions to improve the environmental footprint, and in particular the carbon footprint
 - « P Sludge Scheme »
- Order of a 1st SLGF fixed thickening solution by Scottish Water in 06/2020
- Site qualification visits underway since 06/2020 with Scottish Water, Wessex Water, Geneco, ...
- First trials, with Welsh Water, on drinking water sludge (tests suspended with the health crisis)

Activity in the USA

- The Covid/health crisis has penalized the execution of several strategic projects (including Orlando).
 - Projects in Florida and Texas to re-start from mid June 2020.
 - But still wait-and-see in the North East of the USA.
- Uncertainties at this stage concerning the commitment of Capex by the municipalities given the ongoing health and economic crises.

The main advantage of Orege solutions (savings in operating costs) should help Orège in its crisis marketing.

- Numerous projects in "pipeline" including several initiated between 12/2019 and 02/2020 for thickening applications thanks to the deployment of a containerized SLGF demo unit.
- And of course, the implementation, starting immediately, of the commercial partnership with Alfa Laval in the US should be a game-changer for Orège in that market.
 - Technical recognition of SLG solutions by the world leader in sludge treatment solutions.
 - Notoriety and "insurance" for municipalities and engineering companies.
 - Access to Alfa Laval's direct and indirect distribution networks.
 - Access to construction, rehabilitation and extension projects that were previously inaccessible to Orège.
 - Numerous opportunities on WWTPs using Alfa Laval solutions (given the installed base).

Strategy 2020 - 2021

To highlight undeniable successes demonstrating that Orge becomes a world reference in the treatment and recovery of sludge, with considerable growth potential

\Rightarrow in the following territories:

- USA & Canada
 UK & Germany & Spain & Italy
 Japan
- \Rightarrow For the following applications:
 - Conditioning & thickening
- Dewatering

• "Boost of digestion"

 \Rightarrow In parallel, Orège wants to deploy strategic and commercial actions to give "SLG sludge" product status and finalize the development of new SLG technology applications.



Some key developments

- 1/ Development of SLG solutions aimed at "boosting" methane / biogas production from WWTPs.
 - Two patents filed in 2019.
 - First promising R&D trials, qualifying and quantifying the impact of a boost in biogas production.
 - A first fullscale project to validate the effects on a WWTP with Aqualia in Toledo (triple application: sludge thickening, boost of digestion and sludge dewatering).
 - A new business model will be proposed: gain sharing.
- 2/ Two new geographic markets have been developed since mid-2019 with the first signed projects under implementation: Italy (Lodi) and Spain (Aqualia-Toledo).
 - Main drivers in Italy:
 - Sludge disposal constraints and associated costs, which are both growing very rapidly.
 - Growing interest in waste to energy applications with sludge: biogas, fuel from sludge pellets ...
 - SLGF mobile thickening units
 - Main drivers in Spain:
 - Boost of biogas production
 - Circular economy and water « reuse »
 - Numerous construction, expansion and rehabilitation projects of WWTPs



- 3/ Qualification and quantification studies of the contribution of Orege solutions for improving the environmental and climate footprint for our customers are initiated with a specialized firm.
 - Approach for our international clients, both municipal and industrial
 - Approach for our shareholders and investors.
 - Main sources of improvement identified:
 - Less transport (CO2 saving)
 - Electricity savings
 - Boost in biogas production, which is a renewable energy
 - Savings in polymers and other chemicals
 - SLG sludge more suitable for landspreading and landfilling
 - "Reuse" of the water produced during sludge treatment by SLG.
 - ... etc.

Three business divisions









Energy

This area covers a wide range of industries such as HVAC, oil & gas, chemicals, biofuels – with a special focus on energy efficiency.

Food & Water

Offers products, solutions and systems in the areas of food processing and water treatment.

Marine

The company has supplied the marine industry since 1917 and has today a broad offering incl. environmental marine products.







A global company



- 39 production units*
- More than 100 service centres
- Sales companies in 55 countries
- Other sales representation in 45 countries

* Plus a number of minor production and assembling units

Competitive strengths





- A global company
- Highly engineered products
- Global market leadership
- Large customer and geographical diversification
- Large base of installed products
- Strong brand recognition

Focus on R&D



- Launching more than 35 new products every year
- Develop products in cooperation with customers and partners
- More than 3,700 patents
- R&D investments (2019): MEUR 103 = 2.3% of total net sales





Food & Water Division

- An introduction



Water and Waste treatment



Water & Waste treatment







Alfa Laval offers you one of the widest product portfolios for municipal and industrial wastewater treatment.



Our wastewater treatment experts are able to advice on how to optimize operations, adopt a circular approach and maximize recovery of valuable resources, regardless of whether it is a municipal or industrial wastewater plant.

Water & waste treatment



Commercial Partnership with Alfa Laval

- A global agreement with the world leader in the sale of wastewater and sludge treatment solutions (around 25% of market share).
- Alfa Laval is a brand known and recognized for over a century -> recognition / validation of Orege solutions.
- In a first instance, a partnership focused on the sale of combined SLG + BFP solutions. Alfa Laval has the largest installed base of BFPs in the world (Alfa Laval and Ashbrook Simon-Hartley)
- Partnership focused on construction, rehabilitation and expansion projects
- The priority market will be the US
- Main drivers of the collaboration with the Alfa Laval Group:
 - Differentiation from the competition
 - Unique innovative conditioning and dewatering solution
 - Environmental / sustainability approach
 - Valorization of SLG sludge in particular for "boost" of methane / biogas production

Commercial Partnership with Alfa Laval

- Main " cornerstones" of collaboration with the Alfa Laval Group:
 - exclusive collaboration on construction or rehabilitation projects
 - A non-exclusive collaboration on existing WWTPs optimization projects
 - Integration of SLG solutions sold ensured by Orège in the US with the support of Alfa Laval technicians for the implementation of combined solutions
 - A joint process of qualification and marketing of projects in the US

• Other phases / areas of commercial collaboration and development will be deployed over the coming months (other geographic areas, applications other than SLG + BFP...)