Business Idea

Missing Link to Close the Loop

InOpSys is committed to providing circular waste or side stream solutions for the chemical and pharmaceutical industry by building and operating mobile and modular purification installations on the customer site. Using a train of selective technology combinations, the company efficiently closes water and material loops, thus, helping the industry reach their sustainability goals by reducing waste and CO_2 emissions.

The costs associated with waste and emissions can, thus, be reduced and value can be created by the recovery of materials, e.g., precious metals like palladium (Pd) or platinum (Pt).

InOpSys uses a decentralized model, creating installations on-site, close to the side stream source. This allows working with unmixed and well-defined side streams and avoids transport as a plus.

The Belgian company is a one-stop shop for the industry, because it does not focus on one single technology, but on a hybrid combination of different technologies. Thanks to this "relay team" of technologies, very high removal rates can be achieved in a more efficient way compared to mono-technology solutions. This also allows InOpSys to remove pollutants in a selective way, leaving easily biodegradable components untouched.

The experts tailor each installation to the specific aspects of the side stream. Every project starts with an in-depth analysis of the challenge by the InOpSys chemists, who determine the applicable technologies at lab scale, with a proof of concept as a result. Afterwards the Engineering team takes over, who eventually ensure that the mobile unit gets built, operated, and maintained on-site.

The customers are unburdened as InOpSys takes ownership from start to finish and offers its service in a CAPEX-free way. InOpSys finances the installation via a pay-per-use model, which spares customers an investment not interesting enough according to their internal return-on-investment guidelines. In summary: InOpSys designs, builds, finances, operates, and maintains (DBFOM) the circular solution.

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INOPSYS
SIDE STREAM SOLUTIONS

Elevator Pitch

Not Accepting the Status Quo

InOpSys was founded in 2015 in Belgium with the ambition to create an alternative to linear destruction, which is a common way of processing industrial waste or side streams. In times of water and material scarcity and increasing pollution, InOpSys—by now a scale-up company rather than a start-up company—wants to do better by introducing solutions to recover both clean water and valuable materials. InOpSys builds and operates mobile and modular purification installations on the customer site, helping the industry reach their sustainability goals by reducing waste, water consumption and CO_2 emissions.

Milestones

2015:
- Creation of InOpSys NV
- First round of investment funding with Gemma Frisius fund and Innovation Fund

2016-2017:
- First contract with J&J
- First installation operational

2018:
- First prize at the Belgian Business Awards for the Environment
- Round of investment funding: entry of new shareholders VMH/PMV
- Headcount increased from 2 to 7

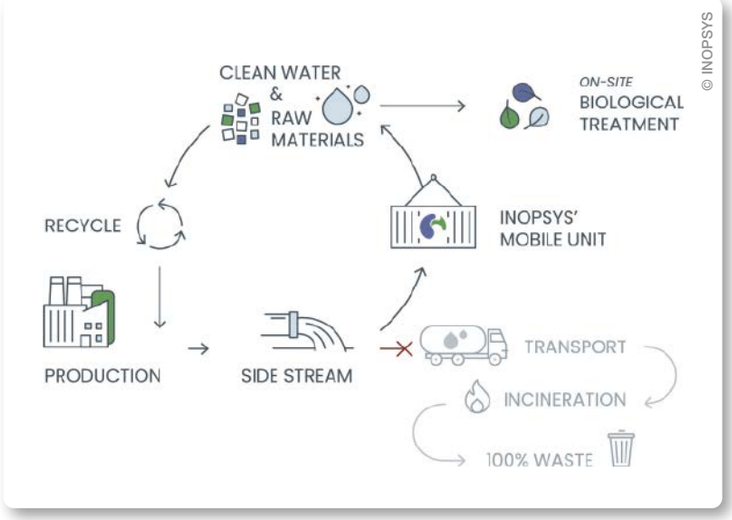
2019:
- Two new installations operational

2020:
- Expansion to the BlueChem Incubator in Antwerp, Belgium
- Round of investment funding: entry shareholders ALIAD (Air Liquide) and Telos Impact

2021:
- Headcount increased to 16
- New API removal (PIE free) installation operational: largest one so far
- "Solar Impulse Efficient Solution" Label for latest API-removal installation

Roadmap

2022-2023:
- Creation of entities in other European countries (e.g., Switzerland)
- New round of investment funding to support global growth
- Roll-out of existing concepts to other countries
- Development of new concepts (e.g., removal of PFAS, EDC)



InOpSys has the ambition to create an alternative for linear destruction, providing circular side stream solutions for the industry, by building and operating mobile installations.

One of the running on-site installations recovers valuable palladium, used as a homogeneous catalyst by the customer, and purifies the wastewater, closing the loops.