Software platform for digitalisation of recycling logistics

Summary

A German startup has developed a software platform for digitalisation of recycling logistics combining an easy-to-use customer app, sensors and intelligent containers with analysis of information, optimised route planning and material flows. Application to all types of disposal including industrial wastewaters or used textiles are possible. License agreements combined with service agreements are offered to waste disposal contractors in EU countries. Financial agreements are offered to investors.

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Reference TODE20170530001

Details

Description

Customer contacts of waste disposal contractors today are still dominated by analogue ways of communication. If the storage for returnable bottles at a supermarket is full or the biomass containers at a restaurant - often a fax is used to order the pick-up. This is not only uncomfortale for the clients, where someone regularly has to check the filling level of disposal containers and order a pick-up on time, but also complicated for the disposal companies as they cannot plan their logistics in advance and have to type pick-up orders into their software systems.

A Northern German startup company developed a digital platform with several benefits for waste disposal companies and their clients:

- With an easy-to-use app, customers may continuously gather information about filling level and order the pick-up on time. For some types of waste, like industrial wastewaters, filling level sensors in the tanks can be connected to the app, showing the exact level of filling. The software can be run on any mobile device like smartphone, tablet or display embedded in waste containers. Thanks to the intuitive design, any employee, even if not familiar with ICT issues, can operate the software without need for further training.

- The continuous information about filling levels at all clients is merged and structured by the platform for optimised planning at the disposal company. Pick-up orders can be predicted and usual customer behaviour can be analysed. This saves ressources and enables much better management of processes and material flows.

- API connections to logistics software optimises route planning for waste disposal trucks, thus time and fuel can be saved.

Application to all kinds of disposals are possible, ranging from plastics, biowaste or returnable bottles to industrial wastewaters or used textiles. The layout of the online-platform can be customised to corporated design of disposal companies.

The SME is offering license agreements combined with service agreements to waste disposal

contractors and any other actors active in recycling processes of any kind. These could also be e.g. fashion companies or charitable organisations that collect used textiles. At first place the company would like to limit international cooperations to other EU countries, Switzerland and Norway. In addition to non exclusive licensing of the software, cooperation can include customisation of design, introduction of the online-platform at customer level, implementation of the system at the disposal company and continuous support and updating.

First commercial contracts and pilot projects with up to 40.000 customers are currently running with very promising results in Germany and Sweden. The solution already raised interest of several waste disposal contractors in Germany, and negotiations about long term implementation of the software at bigger scale are running. In order to guarantee financial stability and continued existence of the company to customers, the startup needs to raise it's equity. Thus also contacts to investors are sought. The company is not willing to sell the solution exclusively to one disposal company, thus investments should be neutral to the market.

Advantages and Innovations

- The software simplifies communication between customers and disposal companies and thus saves time and costs.

- Precise data collection and utilisation allows optimisation of transport routes and material flows and thus contributes to time savings, less emissions and a better implementation of circular economy concepts.

- Customised design and software interfaces allow complete visual and technical integration with existing ICT systems of disposal companies.

- Client apps can be used intuitively without need for further training of employees.

Stage of Development

Already on the market

IPR Status

Secret Know-how

Profile Origin

H2020 – EIT

Keywords

Technology

01003	Information Processing & Systems, Workflow
01003006	Computer Software
10003	Waste Management
10003004	Recycling, Recovery

Market

01001004	Other commercial communications
02007006	Other system software
09008002	Water, sewerage, chemical and solid waste treatment plants

NACE

E.38.1.1	Collection of non-hazardous waste
E.38.1.2	Collection of hazardous waste

Open for EOI : Yes

Dissemination

Send to Sector Group

Environment

Restrict Dissemination to Specific Countries

Austria, Belgium, Bulgaria, Croatia, Cyprus, CzechRepublic, Denmark, Estonia, Finland, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, UnitedKingdom,

Client

Type and Size of Organisation Behind the Profile

Industry SME <= 10

Year Established

0

Already Engaged in Trans-National Cooperation

Yes

Languages Spoken

English
German

Client Country

Germany

Partner Sought

Type and Role of Partner Sought

- Companies or other entities that collect any kind of disposal or recycable material from customers without steady collection times and would like to improve their workflow and customer communication with the software system. These can be waste disposal contractors but also e.g. fashion companies or charitable organisations that take back used textiles.

- Investors that can help the company to raise it's equity in order to guarantee the financial stability and continued existence needed to negotiate long term contracts with disposal companies.

Type and Size of Partner Sought

SME 11-50,SME <10,>500 MNE,251-500,SME 51-250,>500

Type of Partnership Considered

Services agreement
License agreement
Financial agreement

Attachments