



# In the loop

Update PolyStyreneLoop  
August 2018

## *Editorial*

We value the ever-increasing number of contributors and we will continue our efforts on behalf of you, our value chain!

Since our last newsletter in March 2018, many activities were carried out to bring us closer to the start-up of the demo plant in Terneuzen. An update of these activities and the status is described in the Sections “Engineering”, “Permits” and “Collection and pre-treatment”.

As you are aware, in May we had another successful (Open) General Assembly in Brussels. New members and supporters finalised their internal administration and were able to pay the support needed for the demo plant.

Currently, we are focussing on getting the detailed engineering ready, in order to be able to start constructing the plant. The permits needed for building the plant are expected on the 5<sup>th</sup> of December 2018.

To get support for a smooth permit request procedure, we presented our PolyStyreneLoop project to Frans Timmermans, first Vice-President of the European Commission.

On top of the Life Grant for EPS, we were able to gather additional funding of 1 million euro by the Province of Zeeland to be able to handle the XPS insulation boards containing restricted CFC's.

In August we celebrated our first anniversary with the PSLoop core team. We would like to thank the very enthusiastic support from our people and we are looking forward to continue working with you.

*Lein Tange, Jan Noordegraaf, Directors PSLoop*

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## Update

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### *Subsidy for XPS with CFC's handling*

PolyStyreneLoop management was succesfull in applying for a € 1M subsidy from the province of Zeeland, Netherlands. The conditions of the subsidy are still to be set. Realising the XPS extension to the PolyStyreneLoop CreaSolv® plant is budgeted to € 1.3 M. The remaining €300k has to be raised from the companies in the XPS-sector.

### *General Assembly May 2018 and introduction new members*

The PolyStyreneLoop Cooperative gathered on 22<sup>nd</sup> of May 2018 in Brussels, Belgium for its bi-annual General Assembly. Molpoly, Wibro Brohlburg, Lippstädter Hartschaumverarbeitung and Suez were introduced as new Cooperative members, rising the membership to 60 organisations from 14 different countries.

On Wednesday, 23<sup>rd</sup> of May 2018, stakeholders from across the value chain, from producers to recyclers, through to senior representatives of the European Commission gathered for the Open General Assembly. The PolyStyreneLoop project receives strong support from national and European Union authorities in recognition of its contribution to the Circular Economy agenda.

All information presented at General Assembly in May, Brussels is available on the PolyStyreneLoop website [www.polystyreneloop.eu](http://www.polystyreneloop.eu)



Atila Molnar,  
Molpoly



André Flügel,  
Lippstädter  
Hartschaumverarbeitung



Markus Berger,  
Wibro Brohlburg



Virginie  
Decottignies, SUEZ

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## Calendar

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### *September 2018*

- 10 [Week of the Industry- Netherlands](#):– PSLoop presented
- 25/26 [Global Insulation Conference](#) Vienna



### *October 2018*

- 11/12: [Plastic Recyclers annual meeting](#) Cascais, Portugal - PSLoop present
- 17/18: EUMEPS General Assembly Budapest
- 18: PolyStyreneLoop presenting during event on chemistry's contribution for the recycling of plastics and composites in Lyon, France

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## Communication

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### *Company film*

Synthos is supporting PolyStyreneLoop in the process of compiling an animation film for PolyStyreneLoop explaining the CreaSolv® Process and the construction of the demoplant.

### *Support European Commission*

PolyStyreneLoop was presented to the Cabinet of Frans Timmerman and Cabinet Jyrki Katainens. PSLoop is asking for support in providing a consistent legislation, thus enabling us to start up recycle activities. Furthermore, a meeting with the [NGO Systemiq](#) took place, to present PolyStyreneLoop and ask for their feedback.

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## Project Management and Life Grant

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### *Factsheet for the legislation of import and export of EPS containing HBCD within the European Union*

A factsheet has been drafted. BASF will provide additional support on the legislation. In the next few weeks the draft will be circulated to a number of members to check whether the factsheet fulfils their need.

### *LIFE GRANT*

At the beginning of July, PolyStyreneLoop updated the European Agency for Small and Medium-sized Enterprises (EASME) on the progress in the LIFE Grant project. Upon their request, special emphasis was given to the progress in the procedure of the application for the environmental license.

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## Technical Working Groups

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The PolyStyreneLoop Working Groups focus on the different aspects of the project *Engineering and Permits* (Toine Janssen) and *Collection and Pre-Treatment* (Alix Reichenecker).

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## Engineering

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### *Civil Engineering*

We expect the start of civil and infrastructure works in October / November 2018. They are scheduled to be finalised in March 2019. We work towards the “first foundation pile hitting the soil” in Q1, 2019.

### *Plant Systems*

The Basic Engineering is in the final phase. There are still open issues to the process to be resolved by Fraunhofer-IVV, like the incoming material compaction rate and the water content. According to the latest lab testing at Fraunhofer-IVV a rising water content in the incoming material will result in higher dissolution times adversely influencing the plant yield. Regular Telecon meetings are in place to report and discuss on the progress of the testing and investigations. The influence to the dissolution process by the variations in the incoming material is subject to Fraunhofer-IVV lab investigation.

The Basic Engineering of the non-proprietary equipment is in its final stage, having equipment data sheets delivered by EPC. With these data sheets in place the tender procedure with Request for Quotation will start mid-August. Detailed engineering is scheduled to be finalised end of 2018. During this period pilot trials on several aspects will be needed at Fraunhofer-IVV as well.

An overview on long delivery items is in its final stage. Once having final specifications in place, PolyStyreneLoop will send out an RFQ to PSLoop members specifying an extruder, die-face cutter and dryer (available obsolete equipment).

Finalising the building, testing and test water runs of the plant are expected in Q2-Q3 2019.

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### **Permits**

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#### *Import permit for material from Germany*

The transport and storage of incoming material from Germany is hampered due to German and Dutch state regulations as well as permits for transportation and storage.

In order to provide for a temporary storage in Germany, PolyStyreneLoop contacted members. However, up until now we were not successful in finding temporary storage facilities. However, discussions are ongoing. PolyStyreneLoop is also cooperating with RENEWI/Coolrec to find an intermediate solution for material from Germany. Once a solution is in place members will be informed. Discussions were started with the Dutch Ministry and Local government to have cross border approval of the incoming material in place.

#### *Environmental permit*

This permit was applied for on May 4<sup>th</sup> of 2018 and is scheduled to be issued in December 2018. During the application period questions were raised by the authorities. During the answering period the application process was on hold for a period 5 weeks pushing final application towards December 2018.

#### *XPS permit for CFC's*

The permits application pre-work as well as the Basic engineering pre-work to include XPS was initiated. PolyStyreneLoop Management must act carefully to ensure that the EPS application is not adversely influenced by the XPS extension.

### Road building permit

The application for building an entrance road to the PolyStyreneLoop plant was applied for on August 8<sup>th</sup> with a scheduled date for granting mid October 2018. The road will give access to both PolyStyreneLoop and ICL-IP premises. PolyStyreneLoop team will execute the management of the pre-work and engineering. It was agreed that total incurred cost will be taken by ICL-IP and PolyStyreneLoop on a 50-50% basis. The construction of the access road is being tendered with local companies.

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## Collection and pre-treatment

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In June and July the Working Groups Collection and Pre-treatment for Germany, The Netherlands and Belgium had again good meetings. The working packages as well as the bottle necks for collection of material were defined.

Focus for the coming months will be to work on these bottle necks. In order to improve the communication regular GoTo calls have been scheduled among all members active in the working groups and working packages. New members are always welcome to join these calls.

The setup of a guideline on the collection and pre-treatment of different EPS applications is outsourced to Giraf Results scheduled for completions Q4 2018. This guideline must include showcases on selective demolition on a number of PS-foam applications. PolyStyreneLoop members and other demolition companies will be contacted to participate in the selective demolition of PS-foam applications containing HBCD.

An XPS Working Group starts, after financing conditions are set. The in-depth involvement of the value chain companies is of great importance for a succesfull XPS project covering collection, pre-treatment, storage, forwarding and recycling.

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## Messages from our allies

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Total is pleased to become part of the PolyStyreneLoop project. This project demonstrates the strong and necessary commitment to resolve plastics end-of-life issues by uniting the industry which develop and implement low carbon solutions. Total believes that PolyStyreneLoop will play a significant role to make PS and EPS 100% recyclable in the future. Through our broad presence and contacts throughout the value chain, we will promote further collaboration with and participation to the PolyStyreneLoop project.

*Tom Vansteenkiste – Business Manager Insulation Europe at Total*

