



EU cofin Project Annual Report 2018

The EU projects that receive co-finance from the top sectors must submit an annual report on their technical and financial progress. This format is to be used for reporting the technical progress. The report must be submitted by 15 February 2019 to Hans van der Kolk

General information	
TKI Number of the project	AF-EU-17001
Title	BBI Resolve
project leader WR (e-mail address)	Dr. D. S. van Es (daan.vanes@wur.nl)
Address project website	http://resolve-bbi.eu/
Start date	15-06-2017
End date	31-05-2020

Short description/aim project (this information can be published on a website of the TKI/Topsectors)

The project is set to demonstrate production of novel alternatives to replace the hazardous conventional solvents toluene and N-methyl-2-pyrrolidone (NMP) starting from readily available carbohydrates, and carbohydrate derived platform chemicals. Furthermore, the project will create an additional pipeline of bio-based solvents, establish a toxicological safety testing strategy and evaluate possible production processes of the most advanced bio-based solvent candidates, benchmarked against these conventional solvents.

Planning and progress Is the project going according to plan? Are there any substantive bottlenecks? If yes, please explain with a brief description of the current situation

- Yes, the project is proceeding according to plan
- No substantial bottlenecks (that could not be resolved) have been encountered so far.

Highlights and deliverables in 2018 / so far (this information can be published on a website of the TKIs/Topsectors)

WFBR activities in project Resolve in 2018 have resulted in

- The successful synthesis and purification of 35+ new carbohydrate based substances with solvent properties.
- Early toxicity evaluation by consortium partners of these substances (and starting materials, intermediates, and byproducts) by rapid in-vitro assays revealed that several of the new development substances had toxicity issues. Development of those substances was discontinued.
- Based on a stage-gate approach a limited number of new substances were selected (criteria: no toxicity issues, basic physical properties, synthetic viability) for scale-up (100-500 ml) and further application testing.
- Various application testing protocols were developed and evaluated.
- Initial application results are promising.
- For those solvents selected for scale-up basic TEEEs and CPDs were performed by consortium partners.
- Two very successful General Assembly meeting were held in 2018, in Gent and Breda.

Number of delivered products in 2018 (in an appendix, please provide the titles and/or description of the products or a link to the products on public websites)			
Academic articles	Reports	Articles in journals	Introductions/workshops
-	2 reports to the EC	-	-

Appendix: Names of the products or a link to the products on a public website

<http://resolve-bbi.eu/>

<https://www.wur.nl/nl/Onderzoek-Resultaten/Topsectoren/show/Resolve-REnewable-SOLVEnts-with-high-performance-in-applications-and-improved-toxicity-profiles.htm>