

International Conference on

# Sustainable Bioplastics

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### Avantium renewable chemistries update

We have recently announced the completion of the JV with BASF named Synvina.<sup>®</sup> Its goal is to develop world-leading positions in FDCA and PEF by building an upto 50ktpa plant at the BASF's Verbund site in Antwerp and to license the technology for industrial scale production. Synvina<sup>®</sup> will use the YXY process<sup>®</sup> developed by Avantium for the production of FDCA.

There are two projects in an earlier phase which we are able to share more details of.

- Zambezi process – 2G sugar biorefinery and
- Mekong process – to produce bio based monoethylene glycol (bio-MEG)

The Zambezi process has great potential to provide sugars from non-food biomass for chemical and bio-polymer applications. Zambezi has several advantages over other 2G technologies: static biomass, avoidance of pretreatment, high purity glucose products, near quantitative yield, produces clean lignin and is feedstock flexible.

The Mekong process is one-step, high atom efficiency process which is competitive with the oil based MEG. The current commercial route to bio-MEG is a multistep low atom efficiency process, making bio-MEG too expensive, especially in a low oil environment. With bio-MEG demands estimated to reach 3 million tonnes in the next few years and the wider MEG market some 10x this volume, the potential for the technology is enormous.

The current status and perspectives of Zambezi and Mekong will be discussed further in the talk.

### Biography

Alan looks after Business Development for Avantium Renewable Chemistries, picking up projects from the incubator stage to when it's time to seek collaborations. For the past 13 years he has been working in a role in business development in the Chemical Industry and before that spent over a decade running R&D projects.

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