



Overcoming hurdles for innovation in industrial biotechnology in Europe

BIO-TIC Non-Technological Roadmap Draft 2

Executive Summary

The non-technological roadmap aims to identify regulatory and non-technological hurdles that may inhibit innovation and prevent the realization of the market and technological potential of IB. Furthermore, the non-technological roadmap seeks to propose solutions to these hurdles by confronting theory and practice. Indeed, the current version of the roadmap is based on an extensive literature study and the subsequent stakeholder confrontation of its findings during eight regional workshops and more than 60 expert interviews.

The regional workshops not only sought the validation of the hurdles found in the literature but also aimed at highlighting the most compelling ones to the people involved daily in IB. Several barriers of IB in general were found particularly worrisome throughout the workshops. These include feedstock related barriers in terms of price and quantity; financial barriers in terms of capital requirements and high investment risk; hurdles related to public perception and communication; and bottlenecks related to the few demand side policies in the field. By gathering workshop participants with different backgrounds and mindsets, but also through the in-depth discussion with IB-experts during the interviews, several tentative solutions to the mentioned hurdles were developed.

The workshops and interviews have inevitably engaged experts with different interests and focus areas, enabling the BIO-TIC partners to push the exercise even further and find concrete information related to the specificities of the business cases. This is how it was pointed out that the food versus fuel debate and its effects on public acceptance, environmental concerns and ultimately the loss of legislative support have created a trauma in the biofuels sector and hindered the development of advanced biofuels. In the case of chemical building blocks, the core issue appeared to be the lack of general interest in biochemical production, whether it is expressed by the little investments, policies or market incentives for CBB's. The biobased plastics business case is mainly faced with problems related to price, lack of critical mass and real regulatory support to foster its competitiveness. The biosurfactants experts revealed that the substantial part of their concerns is related to the high cost of upscaling or building new production plants in order to reach the commercial scale. In light of its still early stage development, CO₂ as a feedstock essentially requires more R&D funding to become operational.

If you are interested in finding out more about the issues raised and the possible solutions for these hurdles, please [click here](#).

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The BIO-TIC project aims to identify the hurdles and solutions for industrial biotechnology in Europe. In order to do so, three roadmaps focusing on market, non-technological and technological aspects are being developed. The following is the second draft of the technological roadmap.

The BIO-TIC roadmapping process revolves around stakeholder engagement, subsequently we encourage any comments and contributions to be sent by end of August 2014 to bio-tic@europabio.org.

All BIO-TIC roadmaps can be downloaded via the web portal www.industrial-biotechnology.eu.

