



f3 – Swedish Knowledge Centre for Renewable Transportation Fuels

Emerging bio-economy strategies and policies in India

Project plan and preliminary insights

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Purpose

- To develop contacts and initiate research on emerging bio-economy strategies and policies in India, with a comparison to European and Swedish initiatives on the bio-economy.
- This project builds on the completed f3 project entitled “A global overview of bioeconomy strategies and visions”.





Background

- The foundations for the project is a cooperation agreement between Lund University, Sweden and the Centre for Bioenergy at the Indian Oil Corporation Limited (IOCL).
- The ambition is to exchange expertise and share knowledge on opportunities for biofuels between Sweden and India. The bioeconomy concept underpins biofuels development.

Key Documents

“India has the potential to become a global hub for research and development and manufacturing in all aspects of biotechnology ... and become a true bioeconomy.”

QUOTE FROM THE ROADMAP

- Published in 2012, the ***Indian Biotechnology: The Roadmap to the Next Decade and Beyond*** provides an overview and vision for the Indian bioeconomy.
- The authors are the Association of Biotechnology Led Enterprises (ABLE) and the Department of Biotechnology for the Government of India.



Key Institutions

- SAHYOG (Strengthening Networking on Biomass Research and Biowaste Conversion – Biotechnology for Europe India Integration) is an important initiative linking Europe to Indian activities on the bioeconomy.
- The objective of SAHYOG is to actively and effectively link research activities implemented within European programmes with related programmes in India.

Key Events

- SAHYOG organised a conference and brokerage event on the bio-economy in India in February 2014 in collaboration with the European Commission and The Energy and Resources Institute (TERI).
- The main topics highlight important areas of work on the bio-economy in India, including:
 - Transition towards a bio-based economy from a fossil based economy.
 - Industry and academia interaction
 - Support initiatives, funding and financing
 - Stakeholder dialogues and policy perspectives



Summary

- The initial research highlights the increasing interest and activities in India on growing the bioeconomy. Visions depict a shift from a fossil-based economy to a bio-based economy.
- The scope for the bioeconomy in India is considerable with healthcare, food security and energy supply all on the agenda. Bioenergy and biofuels are expected to expand in India.
- Opportunities for increased collaboration on the bioeconomy, bioenergy and biofuels between Indian, European and Swedish organisations appears significant.



Key References

- Association of Biotechnology Led Enterprises (ABLE) and the Department of Biotechnology for the Government of India. (2012) ***Indian Biotechnology: The Roadmap to the Next Decade and Beyond.***
- WFF India. (2013) ***The Energy Report – India: 100% Renewable Energy by 2050.***
- Department of Biotechnology for the Government of India. (2012) ***The Bioenergy Roadmap 2020: Vision 2020.***
- Department of Biotechnology for the Government of India. (2007) ***National Biotechnology Development Strategy.***
- European Business and Technology Centre (EBTC). (2011) ***Overview of Indian Biotech Market associated with Climate Change.***



Further Information

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