

Biorefining

Biorefining is the process of "building" multiple products from biomass as a feedstock or raw material much like a petroleum refinery that is currently in use.^[1] A **biorefinery** is a facility like a petroleum refinery that comprises the various process steps or unit operations and related equipment to produce various bioproducts including fuels, power, materials and chemicals from biomass. Industrial biorefineries have been identified as the most promising route to the creation of a new domestic biobased industry producing entire spectrum of bioproducts or bio-based products.

Biomass has various components such as lignin, cellulose, hemicellulose, extractives, etc. Biorefinery can take advantage of the unique properties of each of biomass components enabling the production of various products. The various bioproducts can include fiber, fuels, chemicals, plastics etc.

Research

Some research is being conducted as well in order to improve the manufacturing processes. For example, to make plastics, paint, medicines, antifreeze out of syngas, a new catalyst has been invented by Krijn de Jong.^[2]

See also

- Biomass
- Biomass (ecology)
- Forest
- Agriculture
- Biogas
- Bioenergy
- Biofuels
- Biochemicals
- Bioproducts

References

1. "Archived copy" (<https://web.archive.org/web/20090813195555/http://nrel.gov/biomass/biorefinery.html>). Archived from the original (<http://www.nrel.gov/biomass/biorefinery.html>) on 2009-08-13. Retrieved 2009-01-02.
2. New catalyst for making plastics, paint, medicines, antifreeze out of syngas (<http://www.kijk.nl/nieuws/nederlandse-vinding-maakt-plastic-van-planten/>)

Retrieved from "<https://en.wikipedia.org/w/index.php?title=Biorefining&oldid=950627910>"

This page was last edited on 13 April 2020, at 01:58 (UTC).

Text is available under the Creative Commons Attribution-ShareAlike License; additional terms may apply. By using this site, you agree to the Terms of Use and Privacy Policy. Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc., a non-profit organization.