Website address:
https://www.biooekonomie-bw.de/en/articles/news/New-perspectives-for-bioenergy

New perspectives for bioenergy

Decentralised, controllable and stable - renewable energy from agriculture and forestry is an important component in the transition to a bioeconomy without fossil fuels. BIOPRO spoke to two bioenergy experts about current developments in the areas of biogas and wood, PD Dr. Andreas Lemmer from the State Institute of Agricultural Engineering and Bioenergy at the University of Hohenheim and Prof. Dr. Stefan Pelz, scientific director of the Institute for Applied Research (IAF) and professor for forest utilisation, wood technology and wood energy at the University of Applied Forest Sciences Rottenburg (HFR).

In 2050, Germany could potentially cover up to 26 percent of its heat, electricity and fuel needs with domestic biomass. In addition to wood from forestry and landscape management, renewable energies from agriculture (energy crops), but also residues such as straw, slurry, manure or waste can serve as energy sources.

Relying on wind power and solar energy for heat supply will not be enough in the short term, especially in winter. Controllable energy produced from biomass will need to be used to bridge doldrums and dark phases. In future, electricity, heat and fuel will grow ever closer. Technically, much is already possible today. Electric heat pumps supply us with heating energy, vehicles can be fuelled with biogas and wood-fired CHP plants generate heat as well as electricity.

Interview with Dr. Andreas Lemmer

Biogas as a component of the energy transition

Dr. Andreas Lemmer has been involved in the generation of energy from biomass for over 20 years. His employer, the State Institute for Agricultural Engineering and Bioenergy, runs the biogas pilot facility at Unterer Lindenhof near Reutlingen. Scientists here work under practical conditions testing new techniques.

Interview with Prof. Dr. Stefan Pelz

Wood: a cornerstone in energy transition

While a good third of the electricity in Germany now comes from renewable energy sources, the production and supply of heat from renewables has stagnated at around 11.5 percent. Energy from biomass, mainly wood and biogas, accounts for over 80 percent of the renewable energy produced. Bioenergy municipalities show how locally available, renewable raw materials and solar power can be intelligently combined for supplying energy.

Article

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