



**Welcome at
Leibniz Institute
for Agricultural Engineering
and Bioeconomy**

History of the site

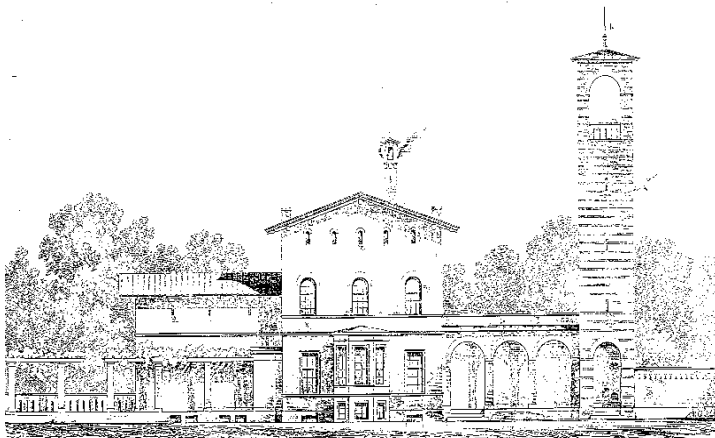
1933
Independent research center on
agricultural mechanization

1992
New foundation after the
German reunification

1927
Experimental farm of the
Agricultural University Berlin

1952
Central agricultural
engineering institute of GDR

Today
**Leibniz Institute for Agricultural
Engineering and Bioeconomy**



Bornim Estate main building
(Persius) ca. 1850



Main building, 1955



CIRCLE@ATB

Resources & Infrastructure



- about 250 staff members, interdisciplinary working groups
family-oriented human resources management



- targeted promotion of young scientists



- excellent scientific infrastructure (laboratories, pilot plants,
experimental areas)

- consistent scale-up

- internationally networked



- close to practice through cooperation with agriculture and industry



- 50 % institutional funding from the federal and state governments
(total funding of 14.7 million euros in 2020)
Third-party funding of approx. 30 %



Vision & Mission

Our **Vision**:

A circular, diverse, innovative and sustainable bioeconomy produces healthy food for all, operates on the basis of renewable raw materials and facilitates the realization of One Health for humans, animals and the environment.

Vision & Mission

Our **Mission**:

ATB is a pioneer and a driver of bioeconomy research.

We create the scientific foundation to transform agricultural, food, industrial and energy systems into a comprehensive bio-based circular economy.

We develop and integrate techniques, processes and management strategies, effectively converging technologies to intelligently crosslink highly diverse bioeconomic production systems and to control them in a knowledge-based, adaptive and largely automated manner.

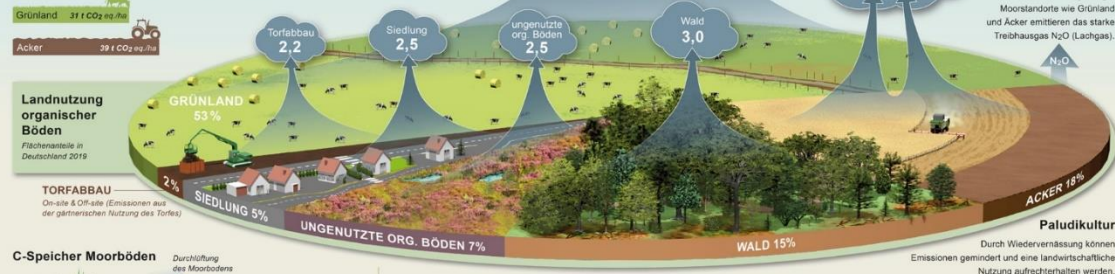
We conduct research in dialogue with society - knowledge-motivated and application-inspired.

Klimawirkung von Moorböden

Moorböden machen etwa 8% der landwirtschaftlich genutzten Fläche in Deutschland aus. Deren Klimawirkung hängt maßgeblich vom Wasserstand und von ihrer Nutzung ab. In Deutschland sind fast alle Moorböden entwässert und werden land- oder forstwirtschaftlich genutzt. Sie sind für mehr als ein Drittel der THG-Emissionen aus der Landwirtschaft und landwirtschaftlichen Böden verantwortlich.

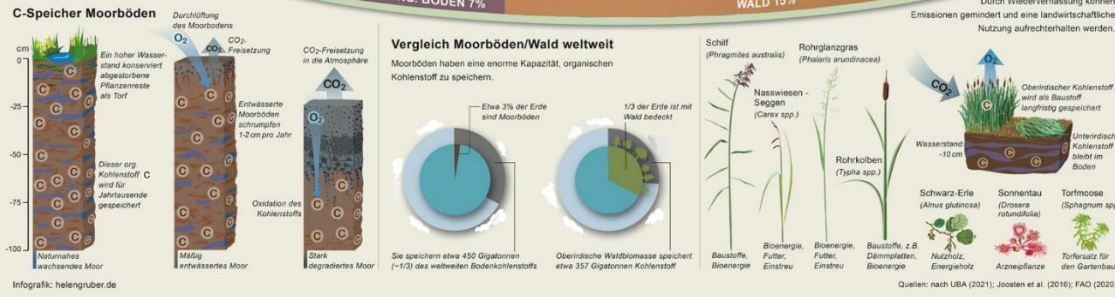
Emission klimawirksamer Gase pro Hektar

Acker emittieren aufgrund durchschnittlich niedriger Wasserstände 20% mehr klimawirksame Gase gegenüber Grünland. Bei gleichen Standortbedingungen sind die Emissionen jedoch ähnlich hoch.

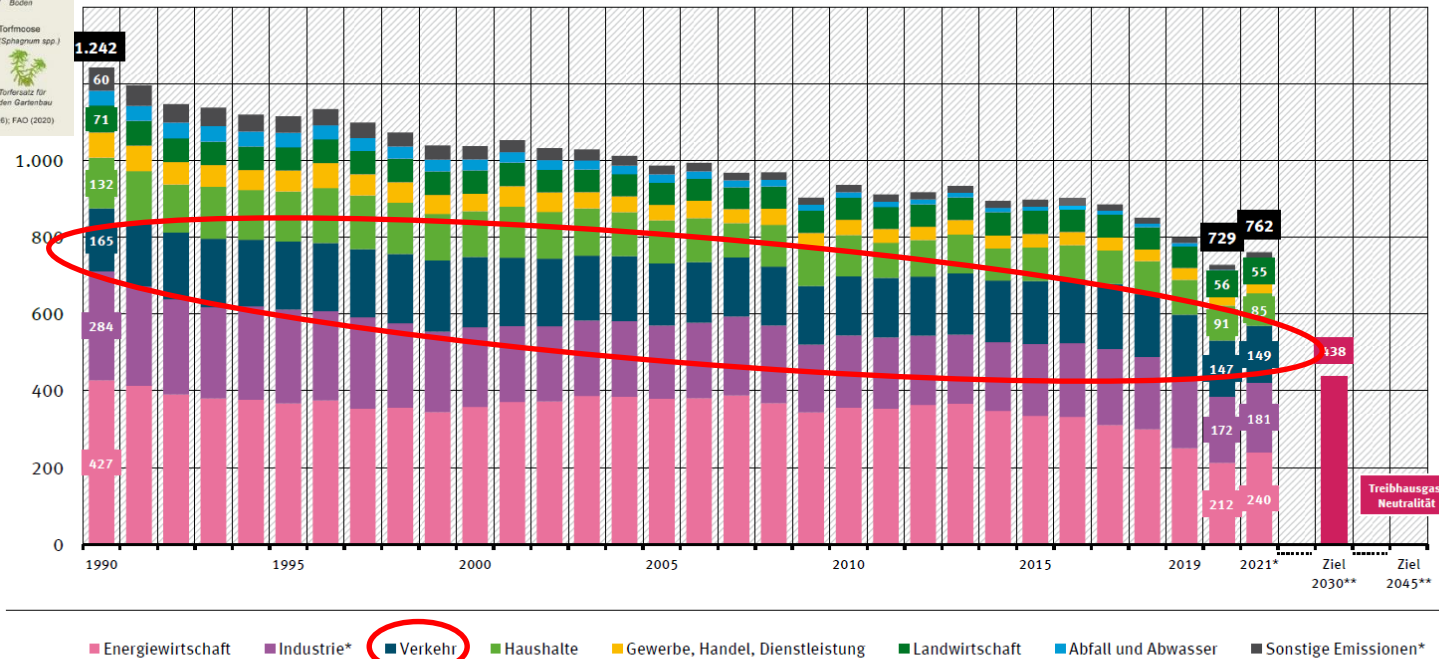


- 53 Mio t CO₂-eq. year⁻¹ from peatlands
- 149 Mio t CO₂-eq. year⁻¹ (2021) from traffic sector

→ approx. 35% of the traffic sector in Germany



Millionen Tonnen Kohlendioxid-Äquivalente





Diversity:

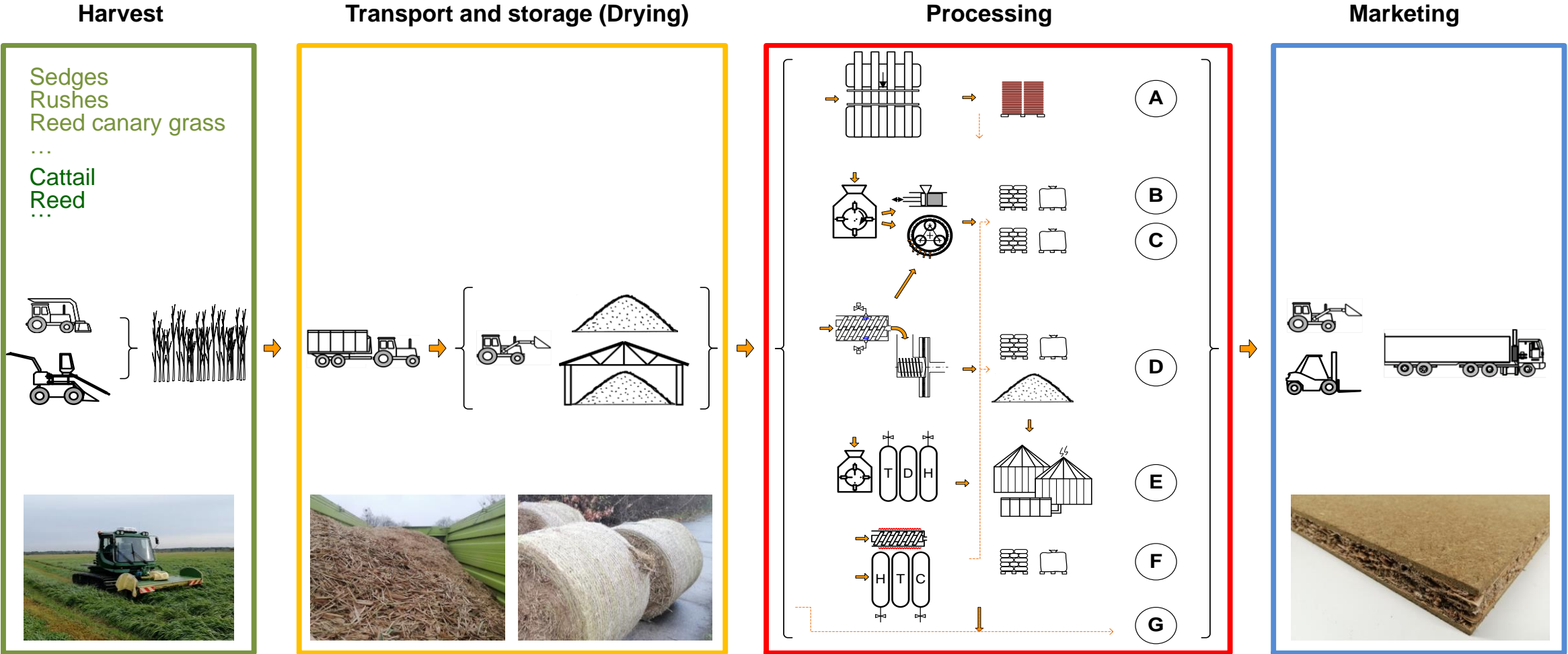
- Biology
- Location
- Harvest time
- Harvest technology
- Storage
- Packaging
- Orientation
- ...

→ Application option?

Harvesting systems



Development of process engineering and value chains for peatland biomass



- A Fiber for board materials, cardboard, pulp molding, insulation materials
- B Pellets and briquettes as fuel
- C Pellets as bedding e.g. for organic farming (poultry farming)
- D Fibers for peat substitutes e.g. for organic farming

- E Residues, thermobarical hydrolysis products for biogas & lactic acid production
- F Biochar from pyrolysis, HTC & gasification technology
- G Co-combustion in biomass cogeneration plant





For more information on our research

www.atb-potsdam.de/en

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