... we are situated at the BASF headquarters in Ludwigshafen, Germany

BASF intro and overview – sustainability & Algae

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KTC Renewable Feedstock for Chemical Conversion

Group Research

1st Mission Arena by Blue Mission BANOS, Gothenburg, Sweden

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Our purpose:

We create chemistry for a sustainable future

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Climate Protection

We aim to achieve net zero CO_2 emissions[1] by 2050.

We want to reduce our absolute CO_2 emissions[1] by 25 percent by 2030 compared with 2018.

[1] The goal includes Scope 1 and Scope 2 emissions without emissions from sale of energy to third parties. Other greenhouse gases are converted into CO_2 equivalents according to the Greenhouse Gas Protocol.

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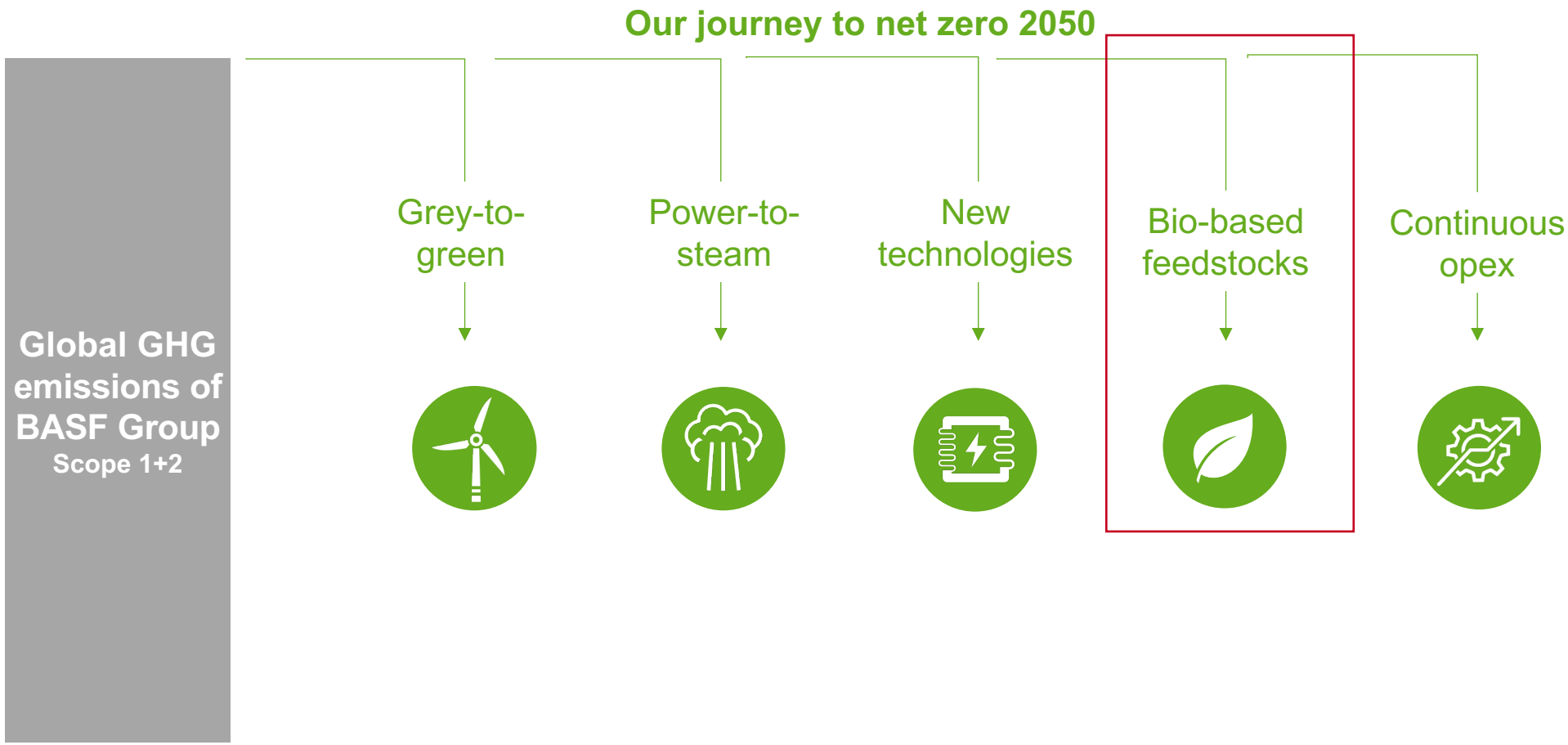
Our levers to reduce BASF's CO_2 emissions



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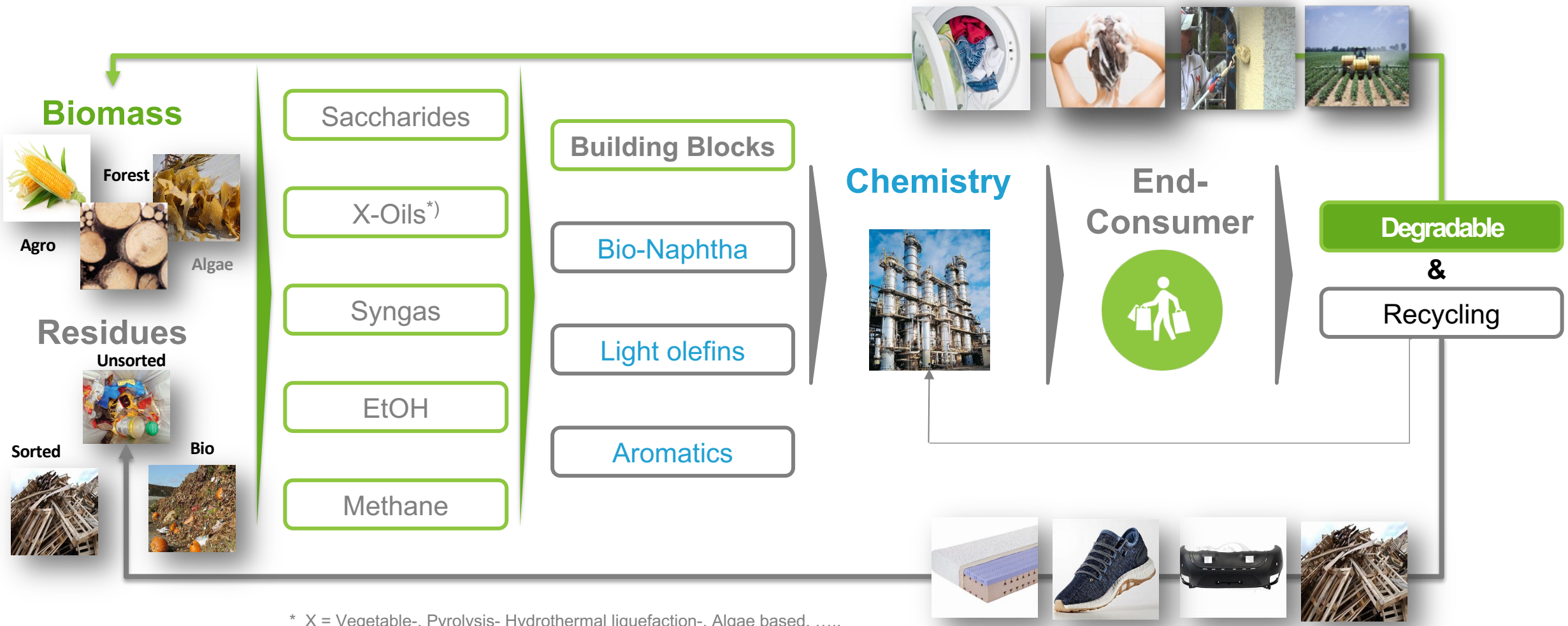
Model of „Renewable Feedstocks“ in BASF Value Chains



* X = Vegetable-, Pyrolysis- Hydrothermal liquefaction-, Algae based, …..

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What could replace petro-based sources?

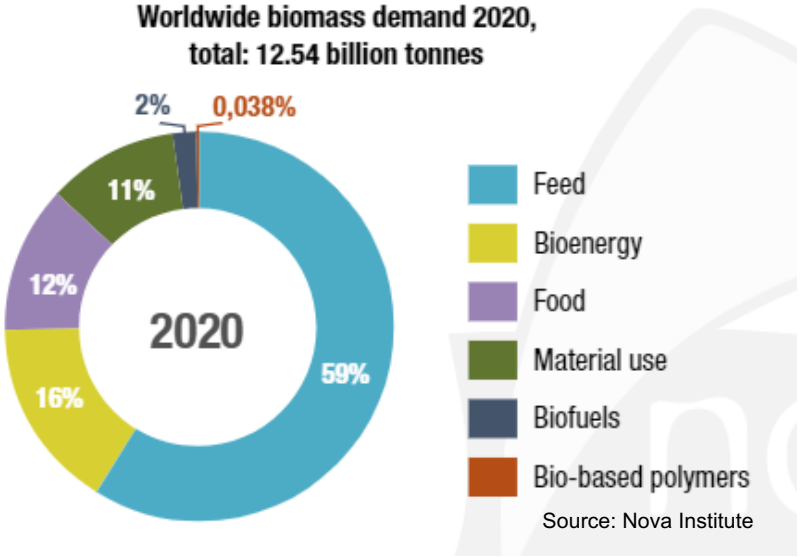
- Fermentation products are usually made from glucose or sucrose
- Currently both is in plentiful supply (2021: ~180mio mt)

- Discussions around the potential future competition between food and chemicals production is increasing

- As need for alternative raw materials increases, new sources of glucose (from lignocellulose, switch grass, bio-waste, algae) are being investigated.

- Algae have a lot of potential as raw material both as a C source but also as a source of new and interesting actives

Lignocelluloses	=> Cellulose, Lignin, Glucose, EtOH, Syngas
Ag-Resiues	=> Pectins, Sugars, EtOH, CH4, Syngas, Veg. Oils
Algae	=> **Polysaccharides**, Sugars**,** algal Oils, EtOH, CH4, Syngas
Cultural Wastes	=> Sugars, bio-oils, Syngas
Manure & Sludges	=> Coke, CH4



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