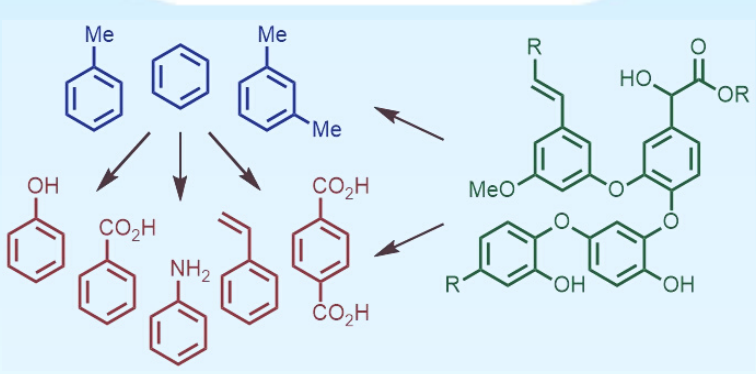
Biobased Economy

The Biobased Economy is all about making products from renewable resources, like biomass. Petrochemicals, which come from non-renewable crude oil, are currently used to make the vast majority of important chemicals

Here's a breakdown of some of the important things we can make from biomass instead:

Aromatics and Phenols

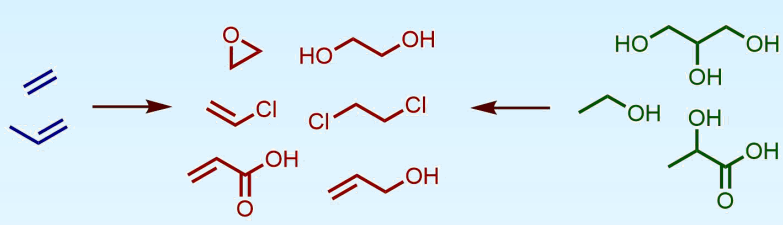
Used to make plastics, dyes, medicines and perfumes



Three compounds from crude oil: **benzene, toluene & xylene**, are the main feed stock for **aromatic chemicals**. Research is ongoing into how to make these or bypass them completely using **lignin**, a component of biomass that's readily available worldwide

2 and 3 Carbon Compounds

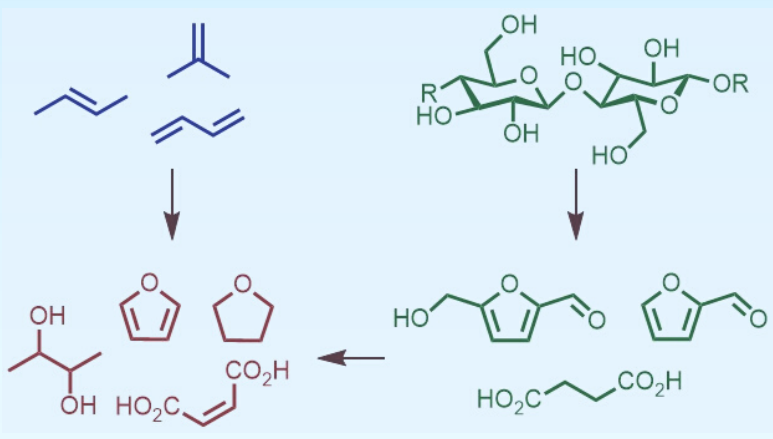
Used to make solvents, polymers and medicines



Ethylene & propylene are two of the most abundant compounds found in crude oil, and form the feed stock for a huge variety of **chemicals**. **Ethanol, glycerol & lactic acid** are incredibly common bio-chemicals that can also produce many of these important chemicals

4 and 5 Carbon Compounds

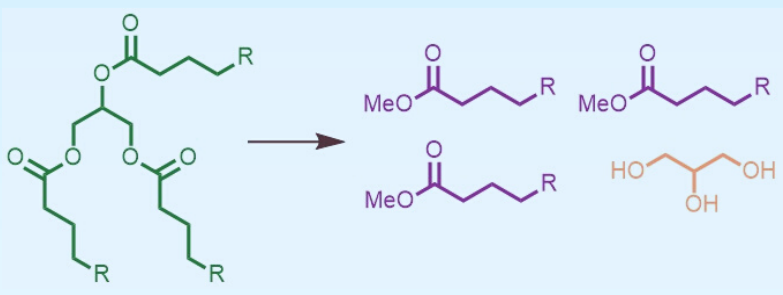
Building blocks for solvents, polymers and medicines



Cellulose is another major component of biomass, and can be converted to useful compounds like **5-HMF & furfural**. These are used to make **important chemicals**, which are usually derived from **petrochemicals**

Bio-diesel

A renewable alternative to fossil fuels



Bio-diesel is used as a transport fuel to rival non-renewable petrol and diesel. It is made from fatty acids, **triglycerides**, which are abundant in nature. Reacting a triglyceride with methanol gives bio-diesel and **glycerol**. Its use is widespread and it's already a valuable part of the bio-economy