

MASS BALANCE AND BIOPLASTICS

What you need to know

At Dow we are committed to delivering a sustainable future for plastics.

To do that, we are introducing sustainably sourced bio-based feedstock into our production. By measuring how much bio-based feedstock goes into our supply, we know how much of our product can be sold as bio-based.

The technical term for this is a **mass balance approach**. Similar types of models are used by many other industries to encourage the adoption of sustainable practices and help consumers get a **bio-based product in the most cost-efficient way**.



How does mass balance work?

1.

Bio-based feedstock, along with other forms of feedstock, goes into our production.

2.

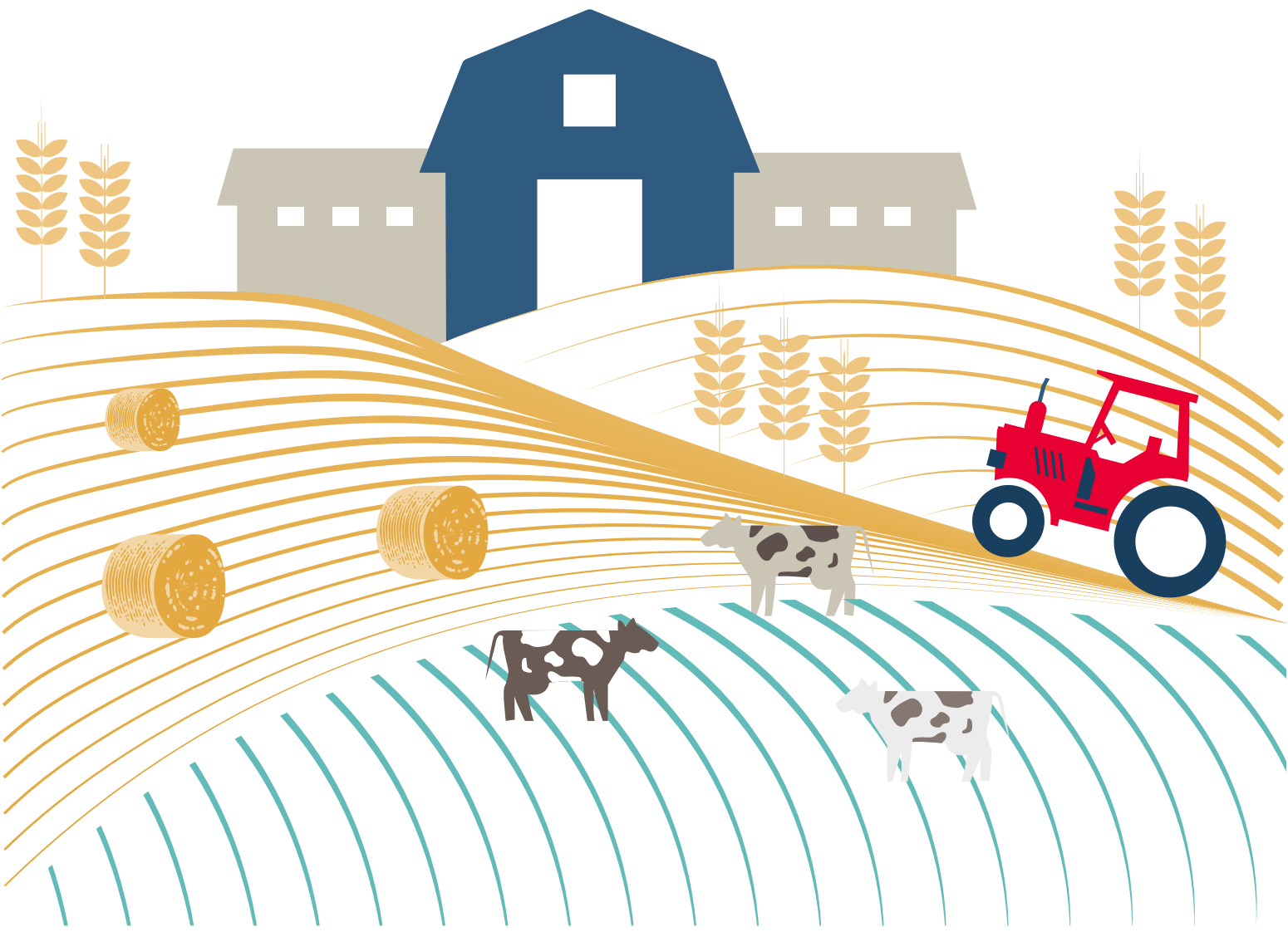
What comes out is a mix of feedstock, but a proportion of what we produce can be sold as bio-based.

3.

The percentage defined as bio-based is certified by an independent body, the International Sustainability and Carbon Certification.

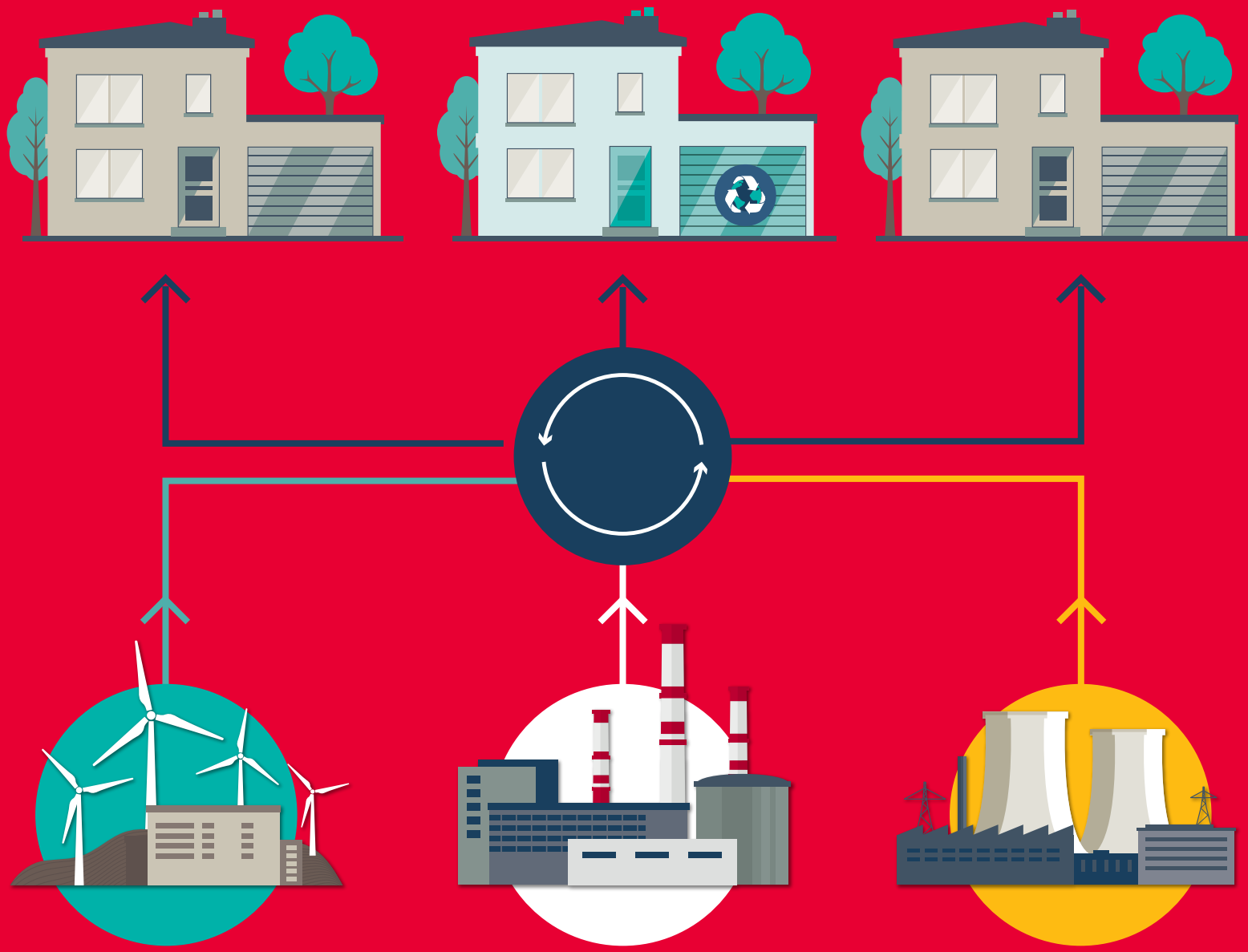
How is mass balance different from segregated production?

You can produce bio-based products using a dedicated separate production process but this would **raise the environmental impact**. A mass balance approach also encourages producers to use more bio-based feedstocks as the global supply increases. At Dow, we are committed to using bio-based feedstocks which **do not compete with the food industry**.



Which other industries use a mass balance approach?

The energy sector uses a similar approach to mass balance. Energy companies sell renewable energy to customers but not every electron going into that household is from a renewable source. The cost of building an alternative energy infrastructure just for renewables would be huge, so the energy provided comes from a **mix of renewable and non-renewable sources**.



At Dow, we are pioneering new ways to create bio-based plastics.

As demand for bio-based plastics rises, we are poised to increase the percentage of bio-based feedstock going into our production lines. Buying Dow's sustainable products is vital to help us move away from reliance on fossil fuels as feedstock.

