

What nature produces in millions of years is done in Minutes: Crude Oil

HSCD (High Speed Catalytic Depolymerization) is a copy of nature's process to convert organic matter into crude oil. The only difference is an acceleration of the natural transformation process from millions of years to only 30 Minutes using the HSCD technology. The cornerstones of the technology, which make this possible, are:

- Using 100% crystalline catalysts instead of minerals contained in soil
- Raising the temperature to 280°C instead of nature's 14°C – 17°C
- Creating an optimized controlled environment in the HSCD plant



Unique Selling Points (UPS):

1. **Neutral CO₂ balance**
Only the CO₂ absorbed by the biomass during growth will be released during the process guaranteeing a neutral balance
2. **No emissions, no chimney**
The closed loop HSCD process releases no emissions into the atmosphere
3. **No dangerous by-products**
Low temperatures prohibit the formation of Dioxins and Furans
4. **No high process pressure**
The process works with vacuum (-0.1 bar)
5. **High energy recovery**
Up to 80% of the energy contained can be recovered
6. **Diesel from renewable resources**
A ton of biomass results in about 300 liters of Diesel, a ton of MSW can yield up to 500 liters of Diesel.
7. **All materials containing hydrocarbons can be converted**
The technology is not confined to renewable materials, but is also suited to treat municipal solid waste (MSW)
8. **Economically efficient with local value-creating measures**
The process is competitive without subsidies and allows for a domestic content of up to 85%
9. **High purity**
The final product is a synthetic fuel (Diesel or Kerosene), which corresponds to the standards EN 590 and ASTM 7655
10. **Wide range of applications and ease of use**
Synthetic Diesel can be used without mixing with fossil fuels