



3R AGROCARBON

ADVANCED CARBON BIO-REFINERY

TRANSPORT FUEL QUALITY BIO-OIL PRODUCTION BY HIGH-TECH
PYROLYSIS TECHNOLOGY AND INTEGRATED OIL REFINERY

BIOMASS CONVERSION TO REFINED BIO-OIL AND ENERGY by 3R HYDRO-DENITROGENIZATION

THE 3R PROCESS:

The 3R is a horizontally arranged indirectly heated low temperature zero emission carbonization system (<850 °C) with high feed flexibility for conversion of wide range of organic waste streams from agriculture, forestry, food and animal waste rendering industries into refined bio-oil.

STANDARD CAPACITY and the REFINED PRODUCTS:

INPUT: 30,000 m³/y (in the case of animal rendering products 20,000 t/y)

OUTPUTS:

- 10,000 t/y refined **Agrocarbon natural phosphate fertilizer**
- 3,500 t/y **Nitrogen fertilizer** (liquid ammonium hydrogen carbonate)
- 6,500 t/y **Refined bio-oil** (transport fuel quality)

The 3R CHARACTERISTICS:

- The **green transportation oil fuels**, produced by upgrading of raw pyrolysis oil, are compatible with their fossil counterparts.
- The 3R technology offers **economical biomass-to-liquid fuel solution**, viable from small to large scale installations.
- **Minimal utility and infrastructure requirements** – no exotic solution.
- **Full scale industrial design** standard throughput from 4 m³/h.
- **Flexibly handles a wide range of feedstock** – agricultural, food industrial and animal by-products rendering waste streams.
- **Modular construction** can reduce the total installation cost.
- **Zero emission carbon processing.**
- **The refined bio-oil provides a sustainable and cost effective alternative for biomass-to-liquid transportation fuel.**

“ CONVERTING TRASH INTO CASH ”

<http://www.3ragrocarbon.com>