Modelling the logistics of bio-energy chains

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Introduction

Modelling the logistics of bio-energy chains helps to determine the best set-up of bio-energy systems. Logistics include transport, storage and pre-treatment, taking into account:

- seasonal fluctuations in supply and demand
- moisture losses due to drying
- dry-matter losses due to biological processes (heating)

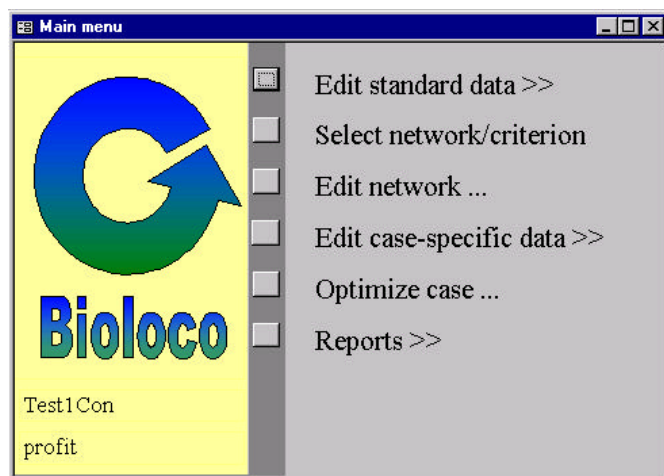Bio-energy system modelled as a network

Logistic models

1. Biologics = Biomass logistics computer simulation
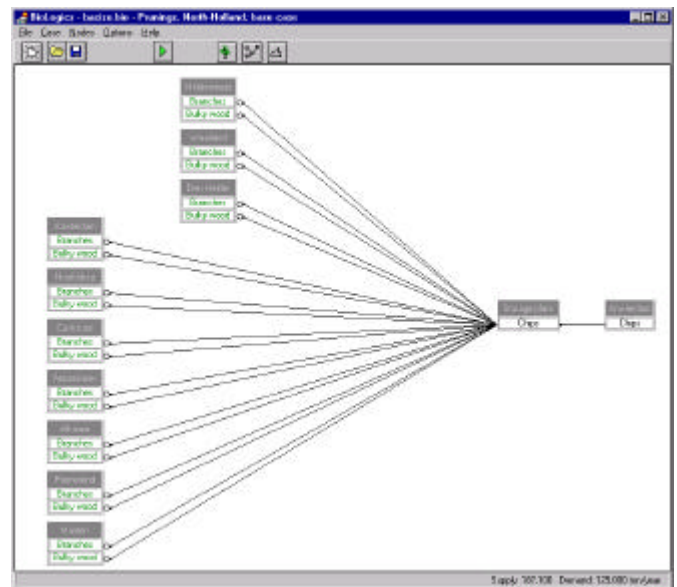Define the exact settings in the network and the model calculates the consequences (simulation)

2. Bioloco = Biomass logistics computer optimisation
Define all possible network components and the model determines the best exact settings (optimisation)

3. Biologics VR = Biologics Virtual Reality
3D visualisation of the results of Biologics

1.

2.

3.