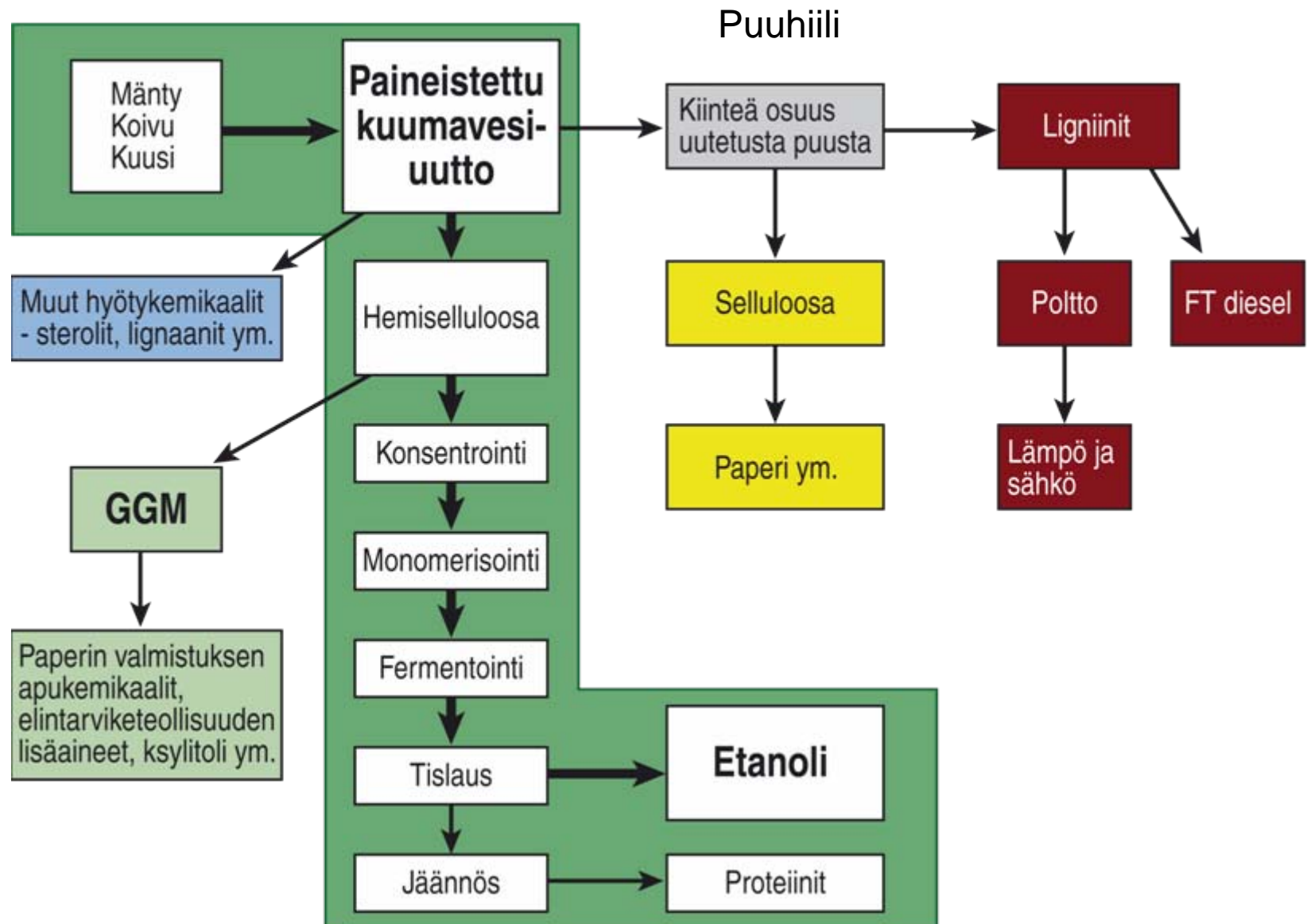


Paineistettuun kuumavesiuuttoon perustuva Biojalostamo, osa 1 hemiselluloosan jalostaminen bioetanoliksi

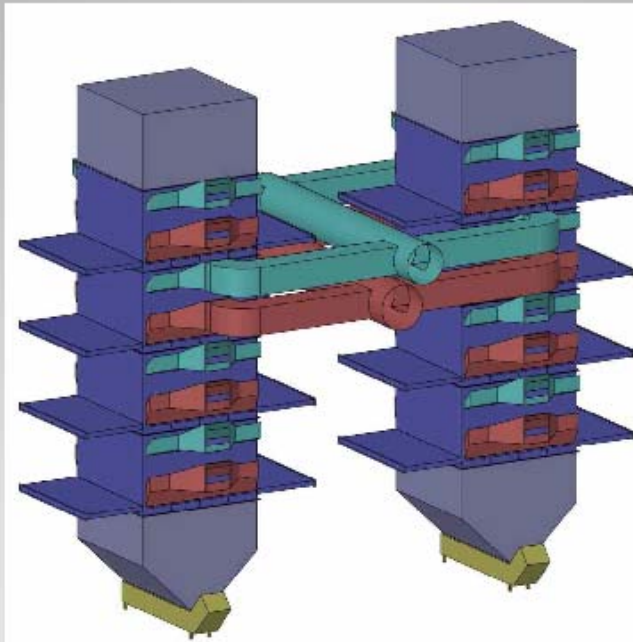




Biojalostamon ja puuhiilen yhteistuotanto

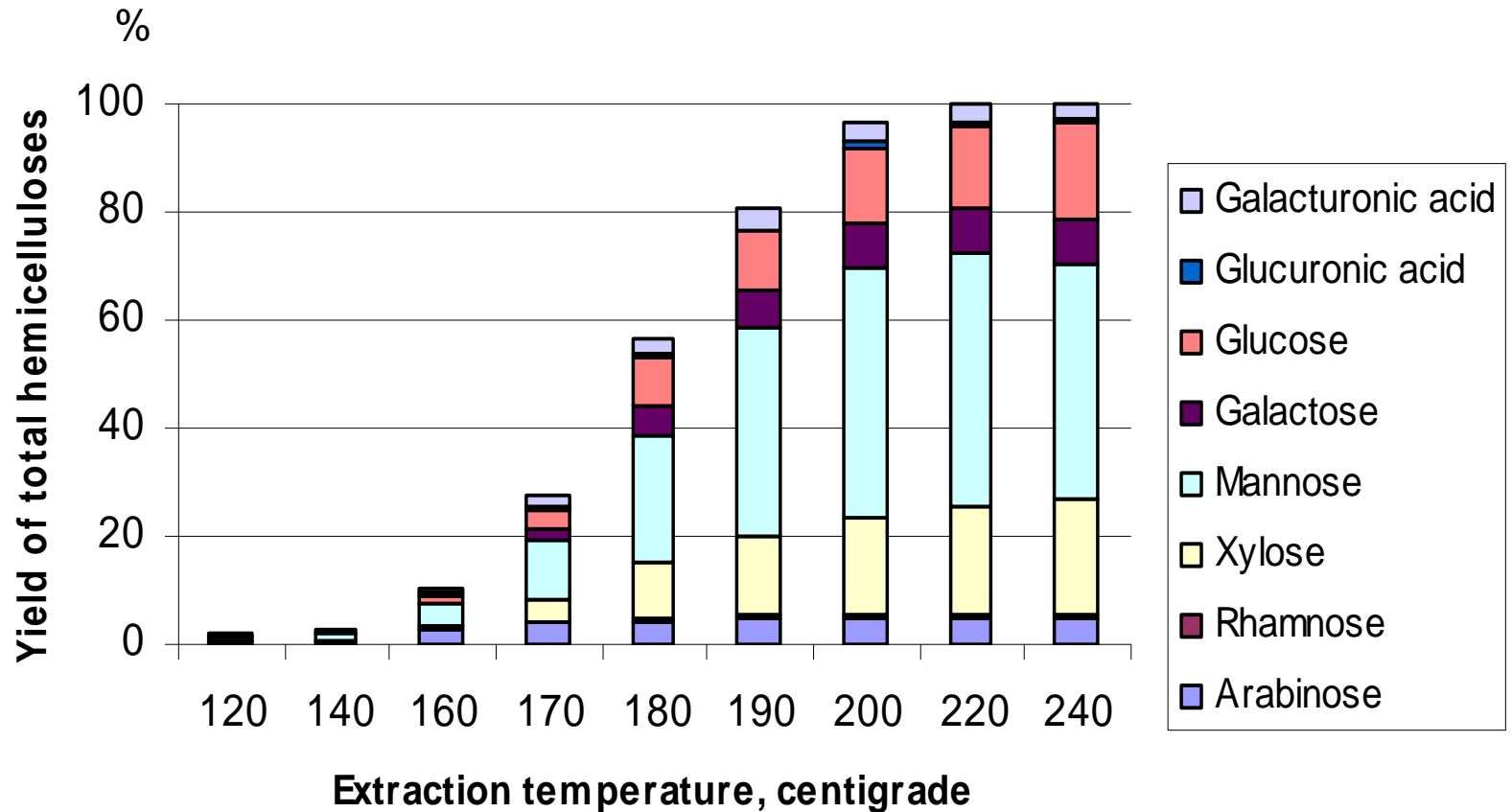
ERMATHERM CTT Biocoal plant projected by Radscan Intervex

In 22 ton/h
crushed chips
with 50 %
humidity



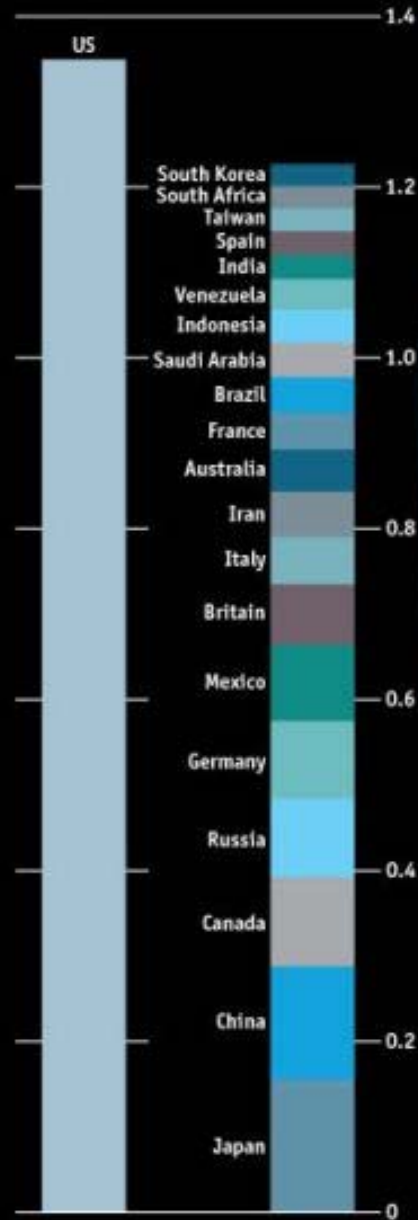
Out 7.7 ton/h
Biocoal = 46
MWh/h + 6.5
MW glycol
heated from
60 C to 90 C

Hemicelluloses extracted from spruce by pressurized hot water extraction (PHWE)



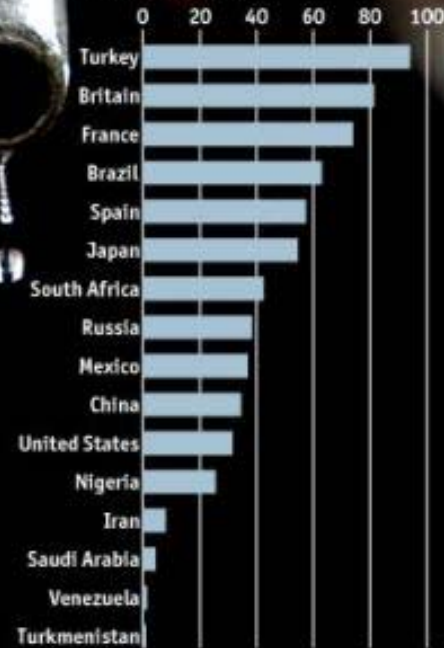
Petrol consumption per day

Litres bn, 2003



Price to fill up a Honda Civic

November 2006, \$



Sources: Foreign Policy; International Fuel Prices 2007