

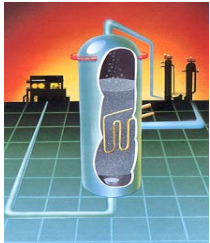


BIO-MASS TO FISCHER-TROPSCH DIESEL

**CLEAN AIR – CLEAN FUELS
BIO-RENEWABLE FUELS FOR AMERICA**



SUN-DIESEL[®] IN YOUR FUEL TANK

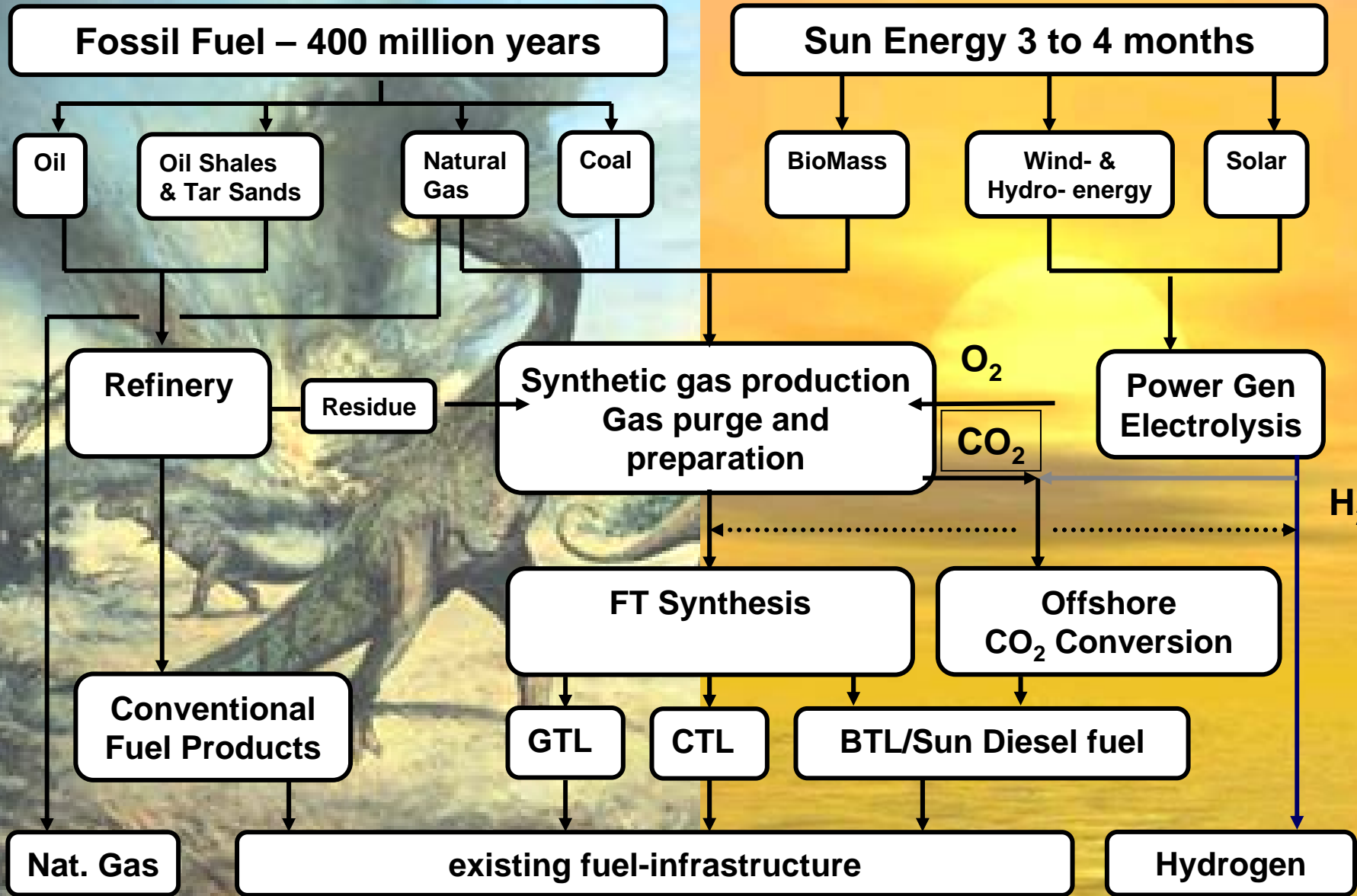


BIO-MASS TO LIQUIDS (BTL)

ENVIRONMENTAL BENEFITS

**TIME TO GROW (“MANUFACTURE”)
THE RAW MATERIALS FOR THE
REFINING PROCESS**

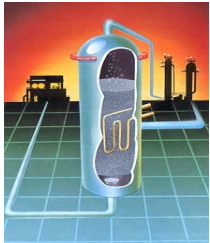
Material / Energy Road Map



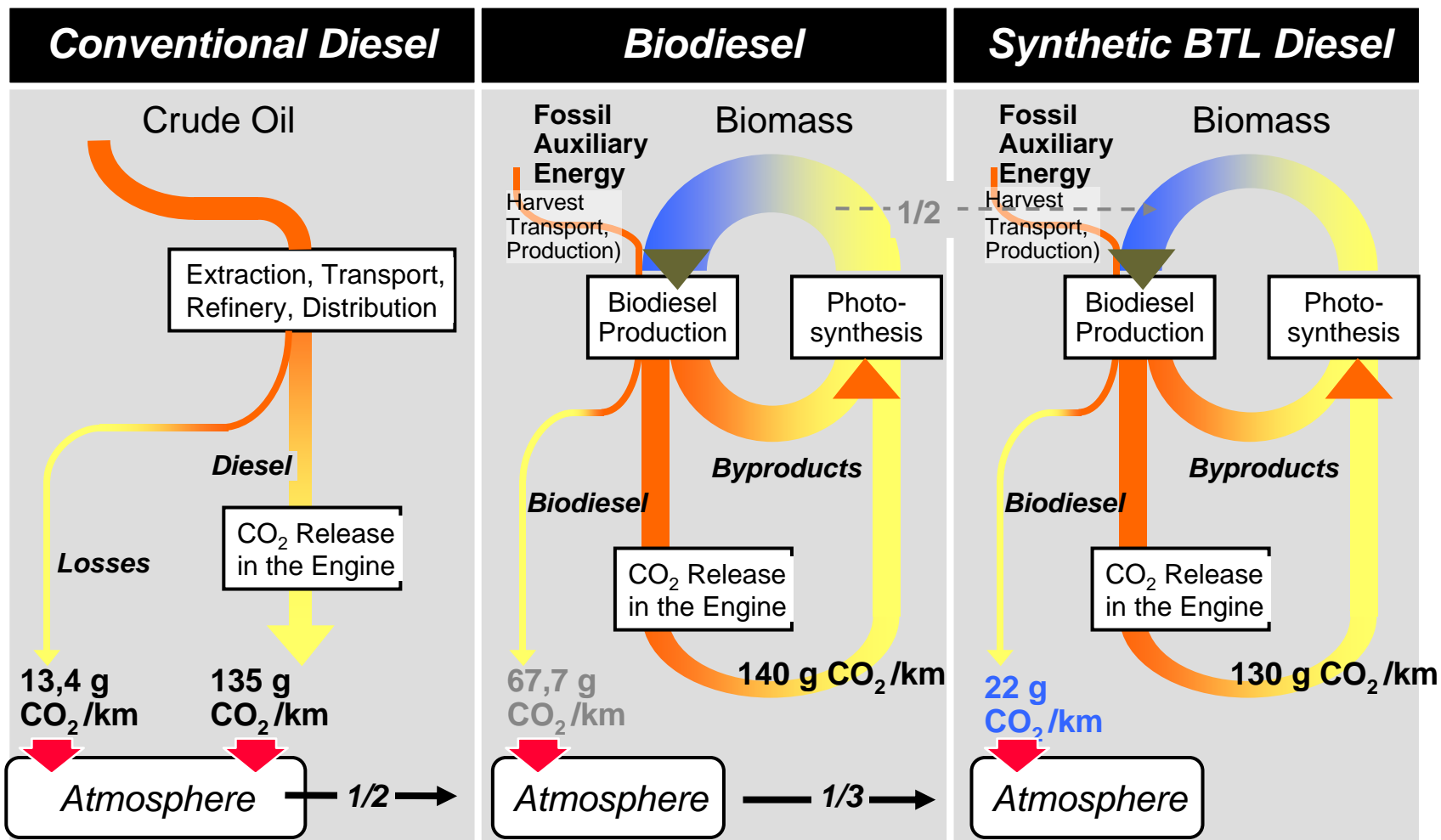


FISCHER-TROPSCH BTL SUNDIESEL[®] ENVIRONMENTAL BENEFITS

**WELL TO WHEELS GHG COMPARISON
“AUTOMOTIVE FUELS”**



BTL Higher Efficiency & Lower CO₂



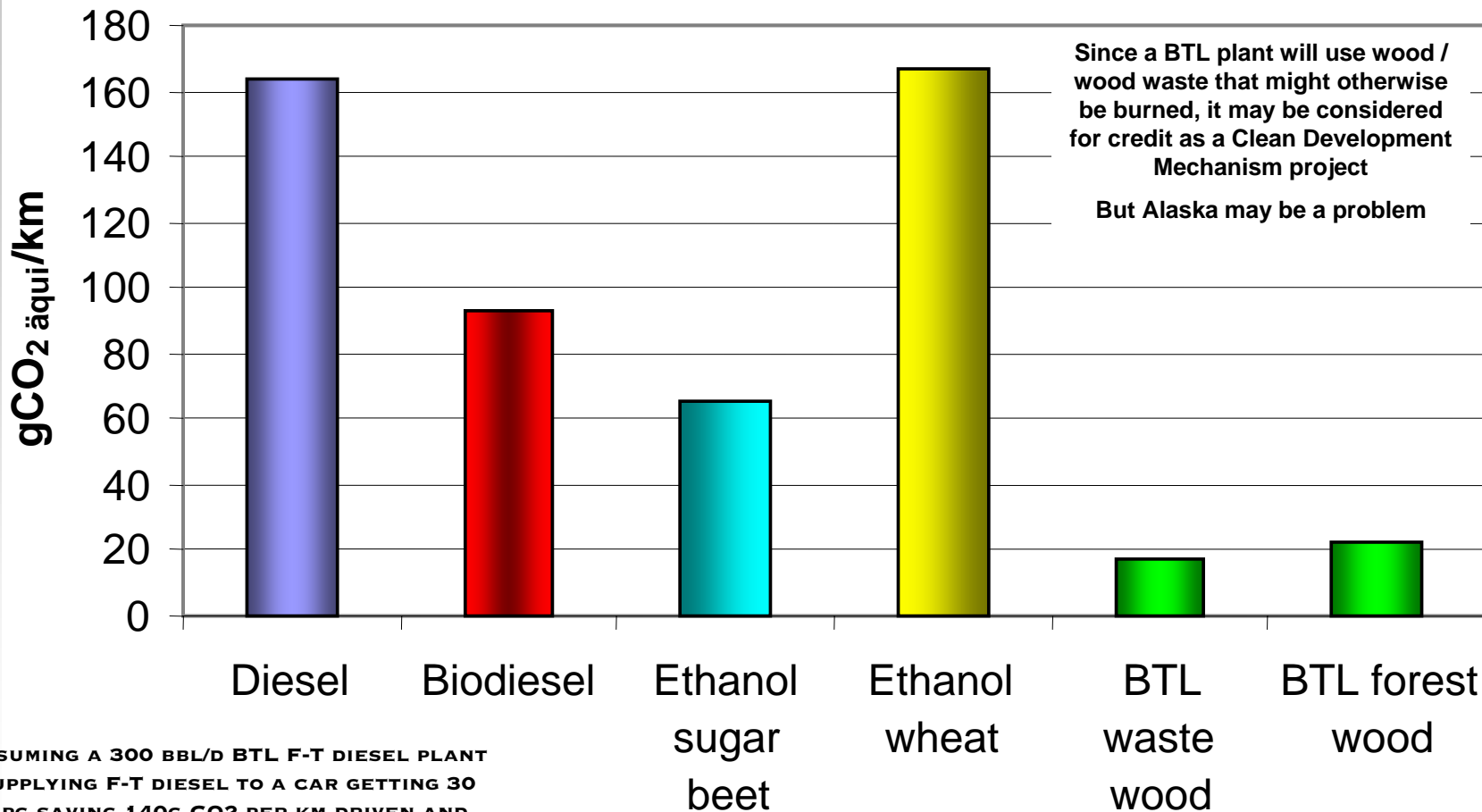
CO₂ Emissions, Compact Car, 1.9 L, NEDC

Source: R.R. Maly, DC & H. Heinrich, VW: View on Biofuels as Road Fuels; DOE Combustion and Fuels Meeting; Washington, March 17, 2004; DC Krahl Mobil oil



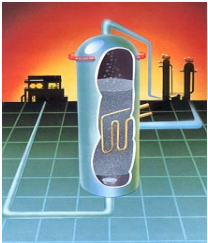
Well-to-Wheels GHG Emissions

(potential Kyoto Protocol CO₂ credits available)



ASSUMING A 300 BBL/D BTL F-T DIESEL PLANT
SUPPLYING F-T DIESEL TO A CAR GETTING 30
MPG SAVING 140G CO₂ PER KM DRIVEN AND
\$15/TON CO₂ EMISSION CREDITS - \$500,000/YR
USING 220T/D OF BIO-MASS - \$6/T REFUND

Source: EUCAR/CONCAVE/JRC, Nov. 2003



Diesel Comparisons

	Diesel CARB¹	BTL <i>SunDiesel</i>	CTL	B/C-TL 50/50%
Density	0.83	0.77	0.77	0.77
Cetan	~ 51	74+	74+	74+
²GHG eq CO₂	165	18	<u>350</u>	~ 170
Sulphur (ppm)	155	0	0	0
Aromatics (vol%)	8	N/A	N/A	N/A

1. California Air Resources Board (SwRI Test)
2. Source: Well-Wheels-Analysis EUCAR/CONCAVE/JRC, Nov. 2003