C₂H₆ liquefies when compressed
3%-4% energy required to compress
Critical pressure 48.72 bar (706.6 psi)
Critical temperature 32.17 °C (89.9 °F)
LNG is gaseous unless cooled below -326 °C

Driving range not limited
2.5x energy per volume mass of storage as C₁₇H₃₆

Gas Vehicle Comparison (BTU/tank)
- 17.5% NG
- 48.6% Compressed C₂H₆
- 65.4% LNG
- 100.0% Gasoline

Green(er) than GTL & LNG
- 6% less CO₂/mile [cars]
- 7%-9% less CO₂ [buses]
- Residence time in the atmosphere
  - C₂H₆ [2-5 months]
  - CH₄ [1-9 years]

Less hassle, Less capital intensive to build
- Not cryogenic
- Compression station - 2 months
- Ethane cracker - 4 years

Natural Gas Wells
[Mixed CH₄, C₂H₆, C₃H₈, C₄H₁₀]
CH₄ - Methane
C₂H₆ - Ethane
C₃H₈ - Propane
C₄H₁₀ - Butane

Separation & Processing
Compression Station
 RECOVERY [Two Pathways]
Pathway 1
Pathway 2
Natural Gas to Pipeline
.. C₂H₆ ..
Compress liquid in bulk tankers
OR Flaring
OR Storage Tank
Delivery Truck Depot
2036 monthly debit $4,686 debit $3,981/month
15,000,000 gallons/year
$345,000 Gross Margin

Source: Lindsay Learson, The Green Machine