

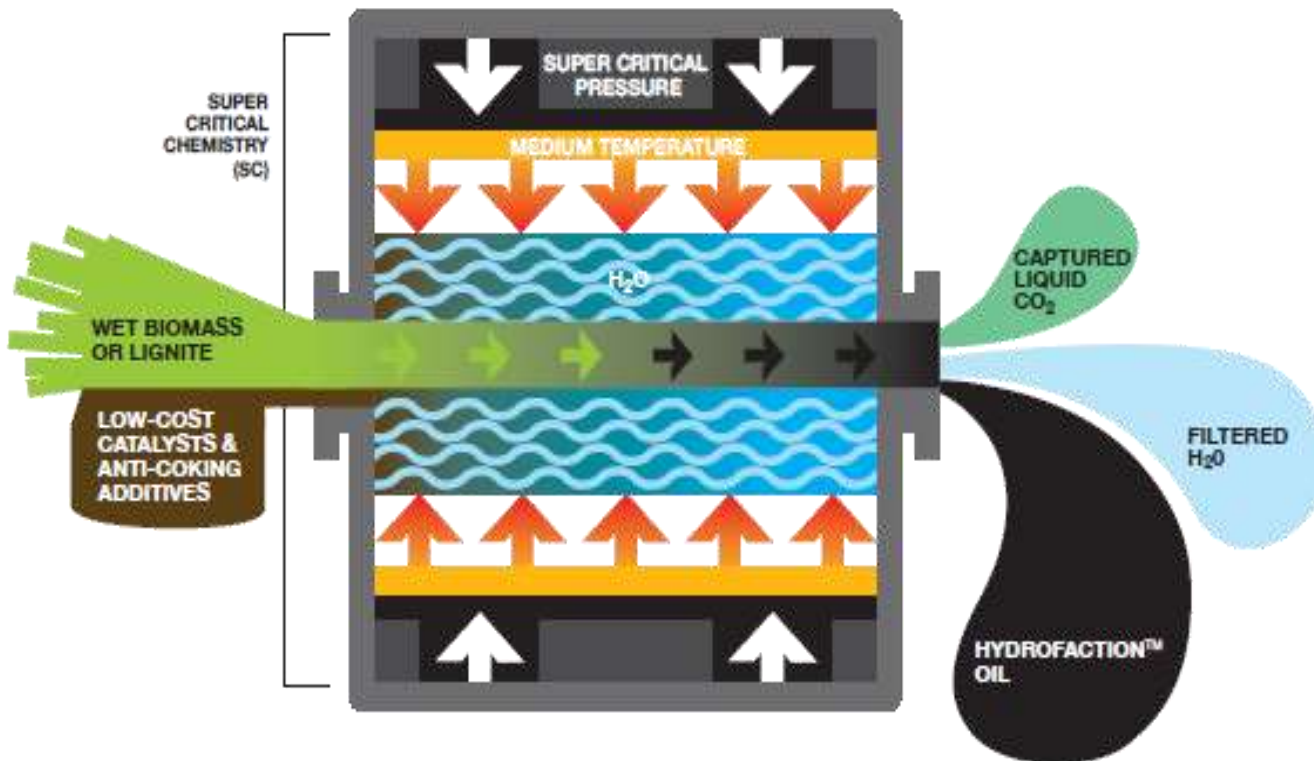
Hydrofaction™ :
**A Solution for Decarbonizing
Long-Haul & Heavy Transport**

From Successful Pilot Plant to
Commercial Demonstration Plant



- Sustainability (food vs. fuel / energy returns)
- GHG emissions of long-haul transport
- Declining traditional fibre markets
- Waste management (sewage, industrial bio-organics)
- Emerging energy cropping tech

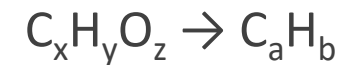




Hydrofaction™ ≈ optimized HTL

uses *super critical* chemistry ($\pm 450^{\circ}\text{C}$ and ± 350 bar)

Liquefies and **deoxygenates** biomass



The US DOE recognize HTL as being an exceptionally cost and resource efficient technology for production of biofuels with the greatest potential GHG mitigation, especially in heavy and long-haul transport

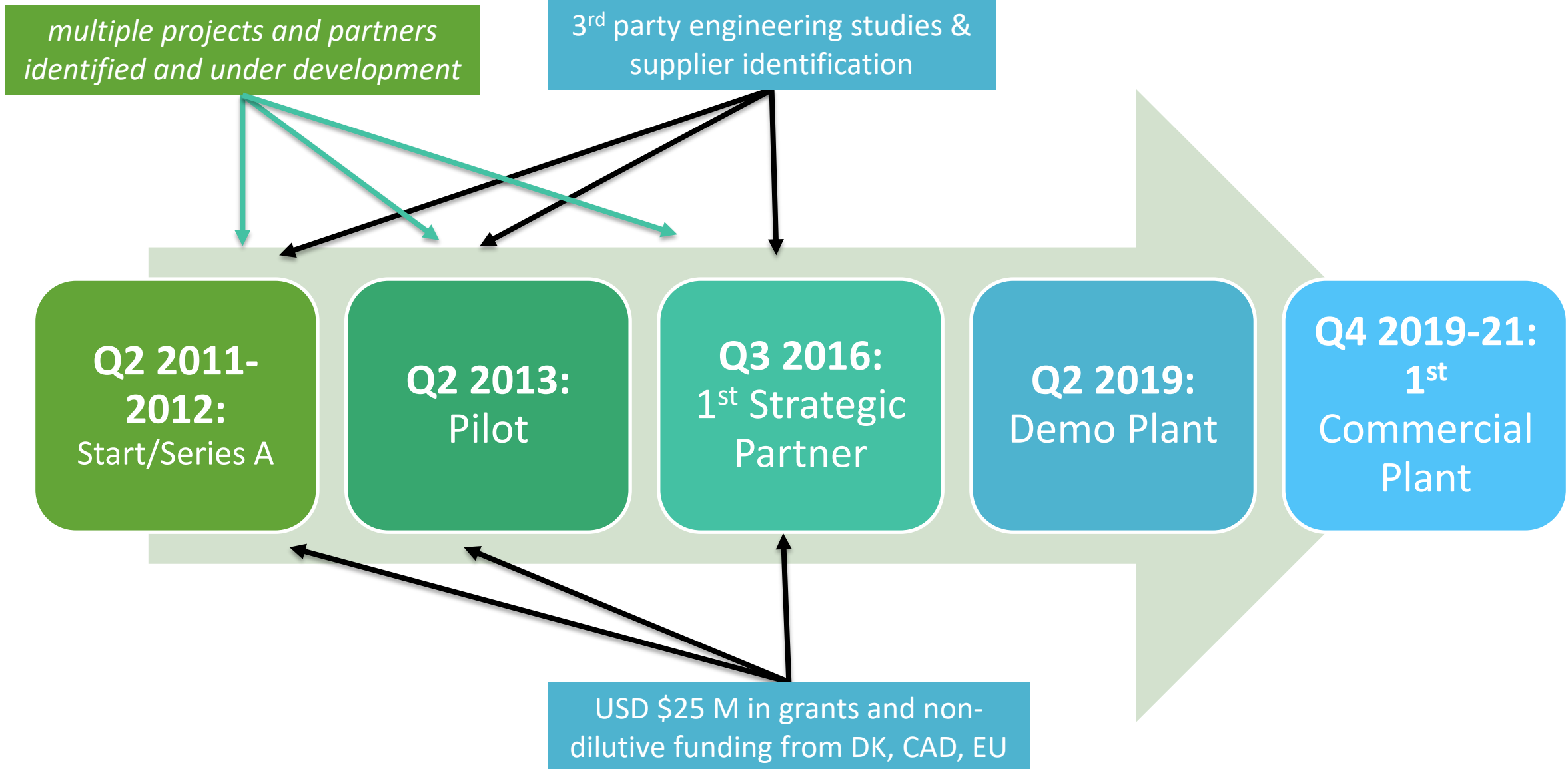
- **High conversion efficiency**
 - Thermal efficiency >80%
- **NO need to dry feedstock**
 - Wet feedstock directly converted
- **Commercial Ready**
 - Thousands of operating hours at pilot
 - Scaling up to a Demonstration Plant
 - Working with some of Europe's largest renewable energy companies
- **Strong IP Position**
 - 100+ patents - pending and granted
 - 21 patent families





- **Petroleum-like advanced biofuels**
 - Targeting sectors incompatible with electrification
- **Compatible** with existing petroleum infrastructure
 - Upgradable to diesel and jet fuels
 - Base input for renewable lubes and chemicals
- **Significant GHG reduction**
 - 75%+ fewer CO₂ emissions compared to fossil (*well-to-wheel*)

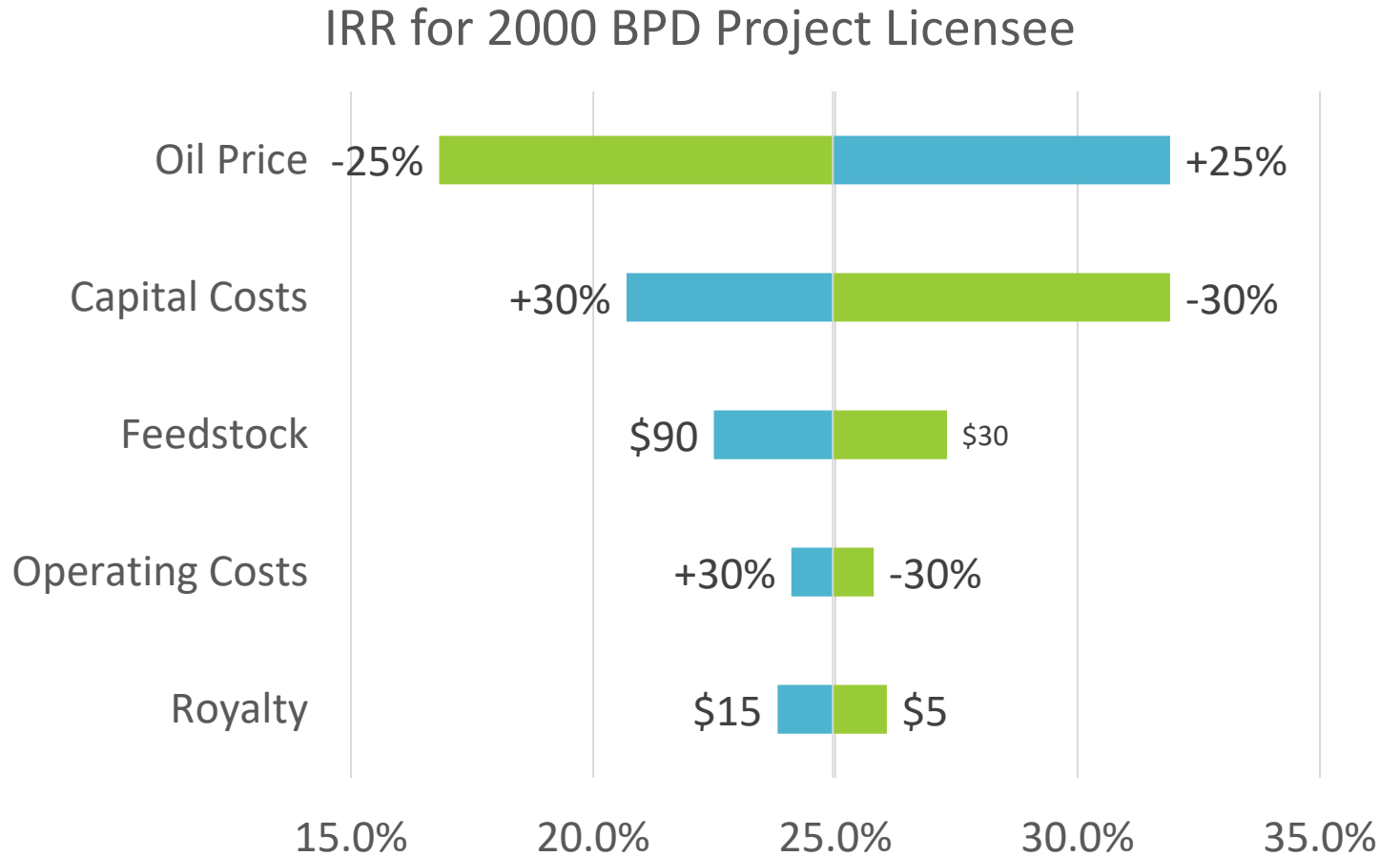
Near Term Growth Strategy



- Demo is a *scale-down* of commercial design
- *Off-the-shelf* sub-components
- *2 independent engineering* studies for 2000+ BPD
 - ✓ Approx. USD \$200M Capex
 - ✓ 100,000 t/yr oil
 - ✓ 240,000 odt forestry residues
- Demo design = future waste application
 - ✓ Waste Market Entry Strategy under dev



- Commercial-scale application:
 - Engineering and known suppliers show **Project IRR 25.0%**



- Forest sector is highly motivated
- Future Waste Markets
 - ✓ Urban wastes (sewage, food)
 - ✓ Crop Residues
 - ✓ Manure
- Others
 - ✓ Equatorial bio-energy / fossil replacement
 - ✓ Sugarcane Bagasse, Palm, Energy Cropping or Algae

