

Biodiesel

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NESTE OIL

refining the future

Climate change

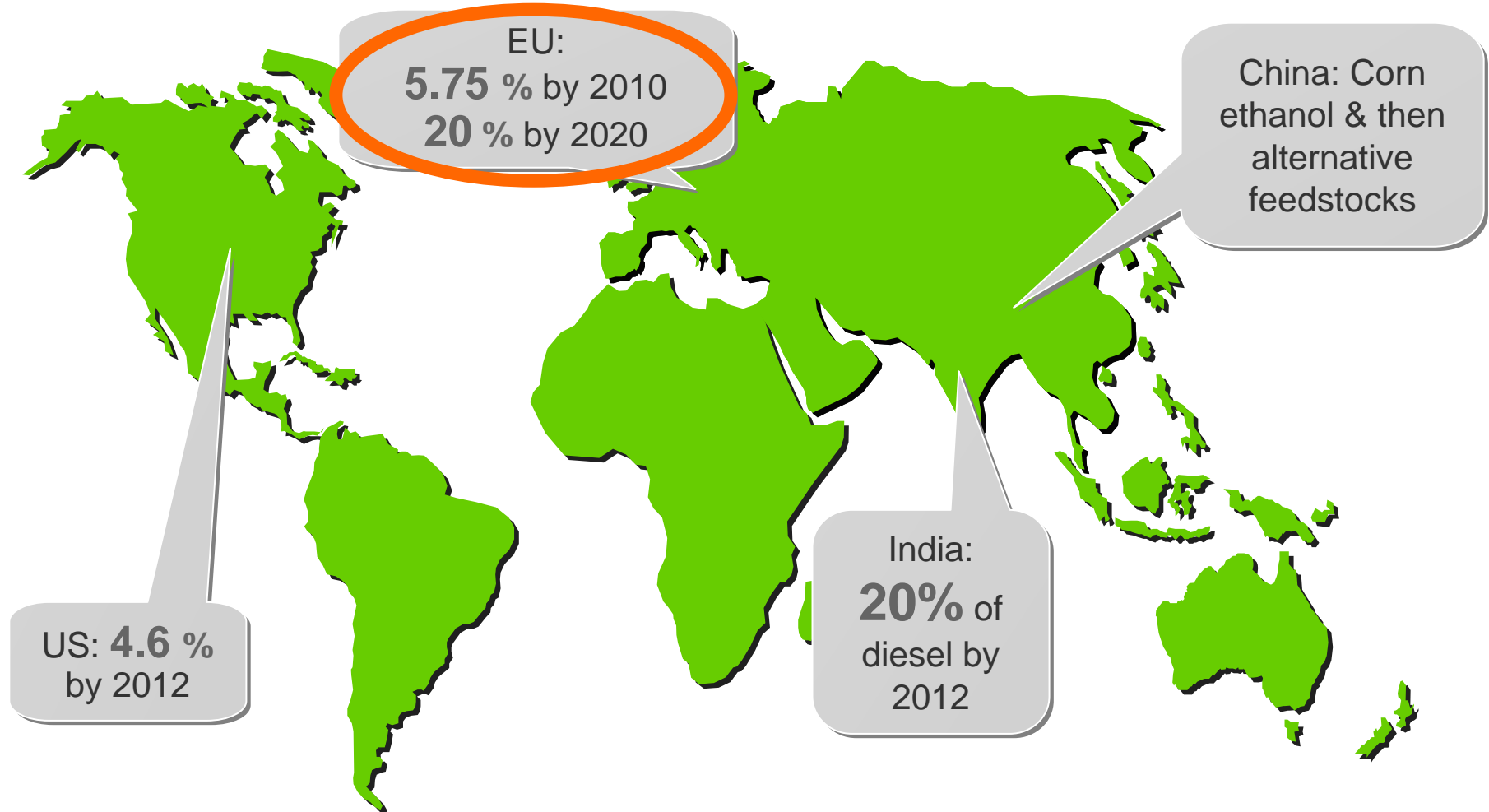
Security of supply

Domestic agriculture

Biofuels set to gain considerable share in transportation fuels market



Considerable growth potential exists

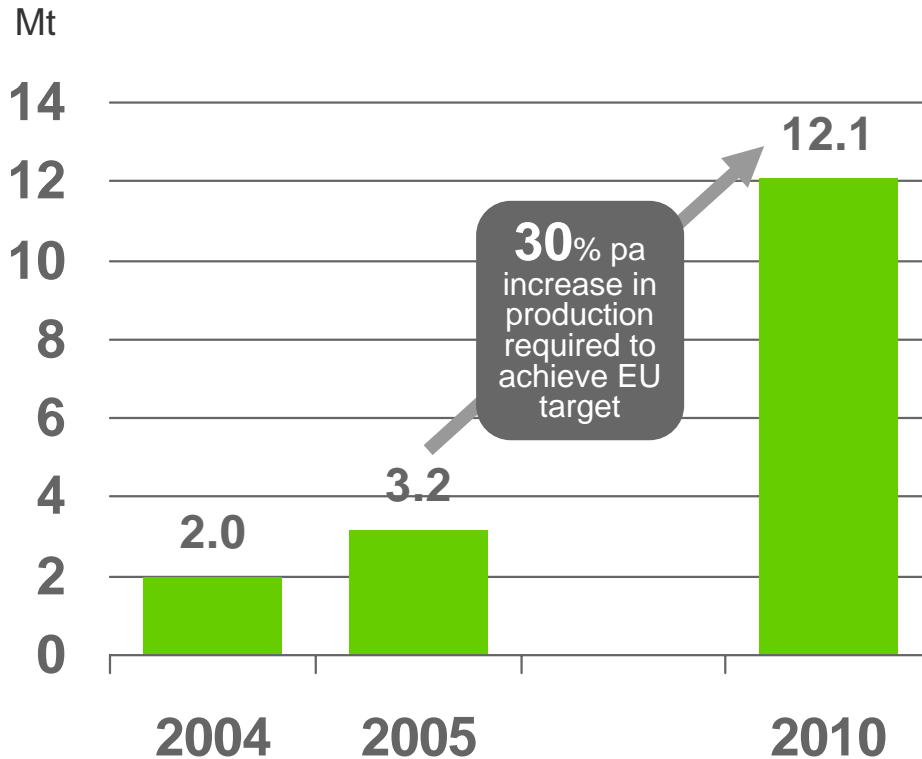


Notes:

- 1) EU target: 5.75% (energy content) biocomponent penetration in road fuels by 2010, 20% alternative fuels in road transport by 2020
 - 2) US target: 4.6% of 2012 gasoline demand to come from renewable fuel components (i.e. 7.5 billion gallons)
 - 3) India target: 20% of diesel pool from biocomponents by 2012, 10% ethanol in gasoline by 2010
 - 4) China target: increasing corn ethanol from 1-3mt. Then focus on alternative feedstocks
- Sources: European Biodiesel Board; Federal Renewable Fuel Standard (Energy Bill); EU commission



Historical and targeted EU biodiesel production



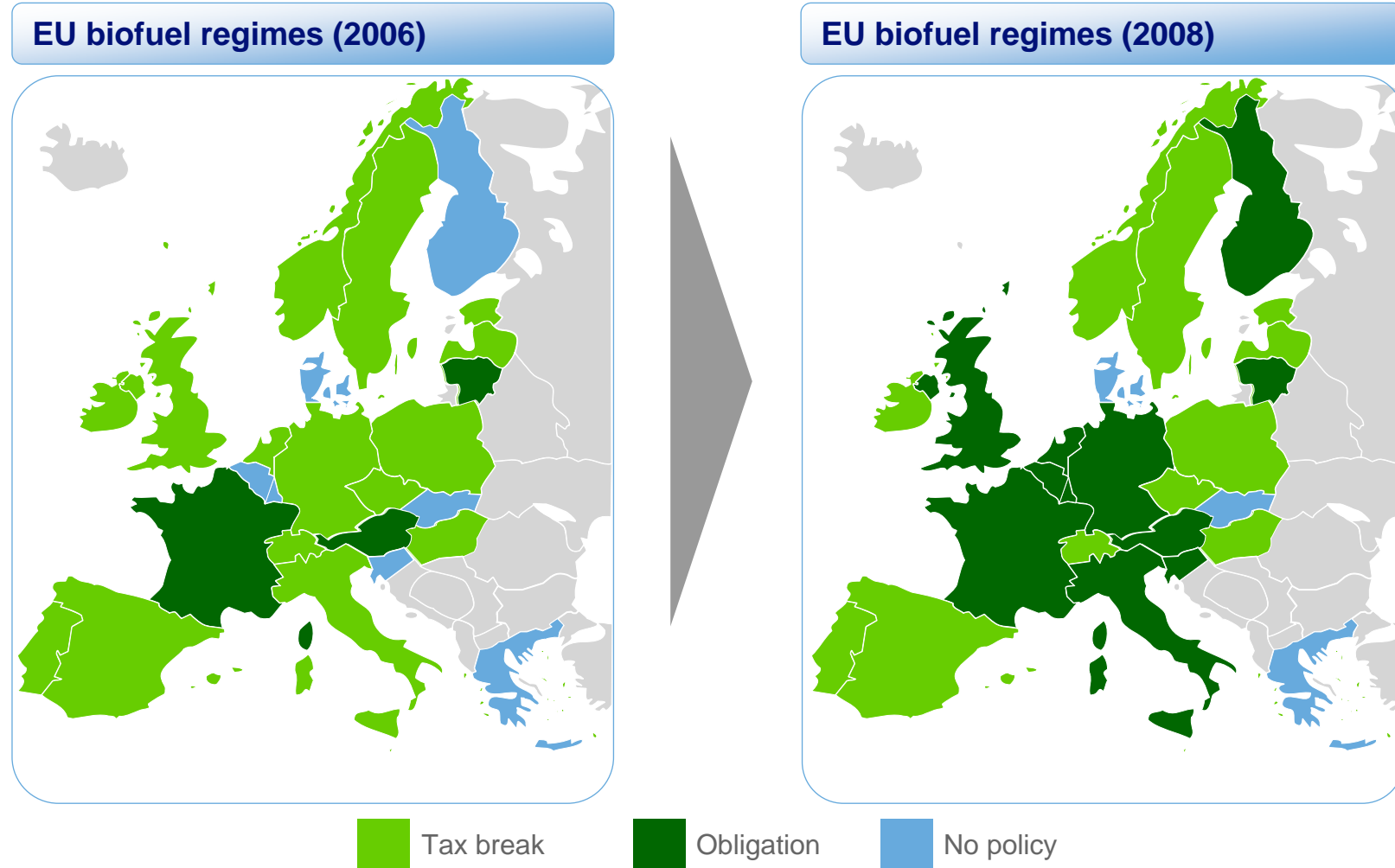
Note: Assumes that both gasoline and diesel have 5.75% biocontent in 2010
Sources: European Biodiesel Board, EU Commission

Key implications

- Need for high quality biodiesel
- Need wide variety of different feedstocks to meet EU target



Government policies further boost demand



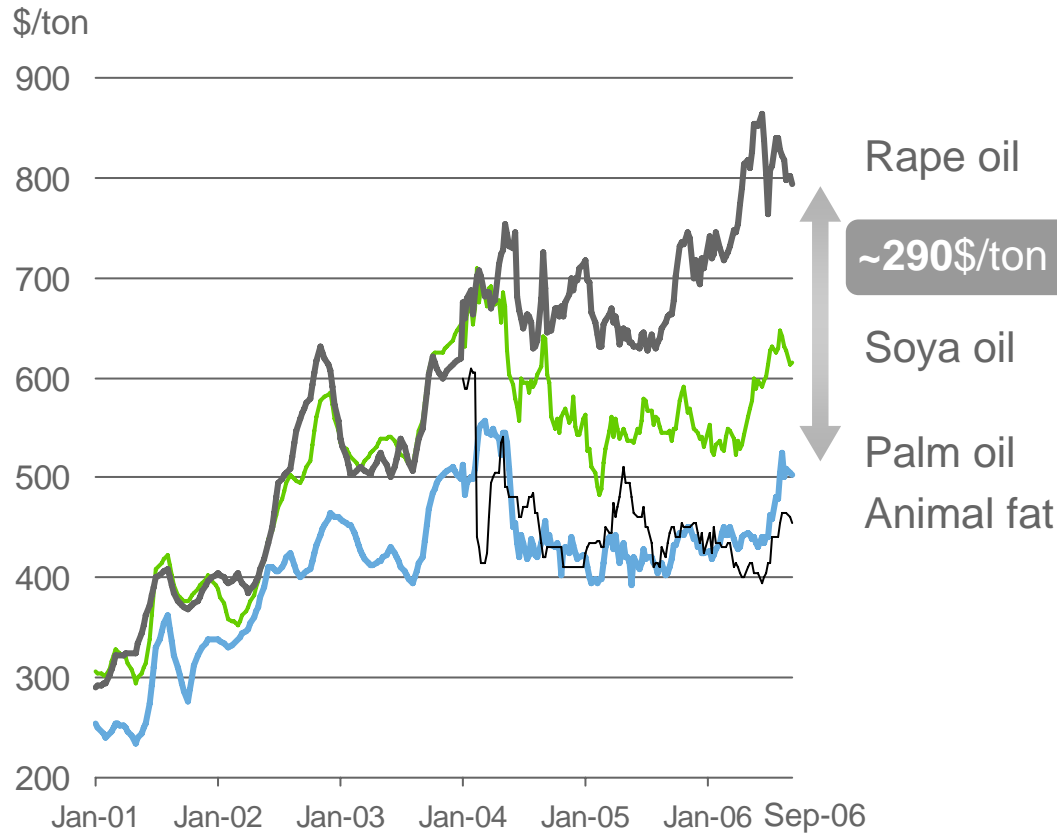
Source: Neste Oil



Our competitive advantages



Price development of different feedstocks Jan 2001 - Sep 2006



Feedstock flexibility

- Rape oil availability restricts first generation biodiesel production from meeting EU targets
- NExBTL can use any vegetable oil or animal fat as feedstock
 - Can fulfil EU target
 - Provides a competitive cost position

Source: Oil World



Fuel Properties	RME	Sulphur-free Diesel fuel ⁽¹⁾	NExBTL
Density at +15°C (kg/m ³)	≈ 885	≈ 835	775 ... 785
Cetane number	≈ 51	≈ 53	≈ 84 ... 99 ⁽²⁾
Cloud point (°C)	≈ - 5	≈ - 5	≈ - 5 ... - 30
Heating value (lower) (MJ/kg)	≈ 38	≈ 43	≈ 44
Sulfur content (mg/kg)	< 10	< 10	≈ 0
Product stability	Unstable	Stable	Stable

NExBTL characteristics

- CO₂ reduction
- Cleaner emissions
- No implications for existing car pool
- No need to relax specifications to achieve high bio content
- Distribution within existing oil refinery logistics
- No need to compromise fuel quality

(1) EN590/2005

(2) Blending cetane number





Tax incentives

- Incentives provide suitable environment for industry to establish
- Fossil diesel price drives the price setting for biodiesel

Obligations

- Obligation system mandates usage
- Production costs of marginal producer (i.e. first generation RME producers) drive biodiesel price

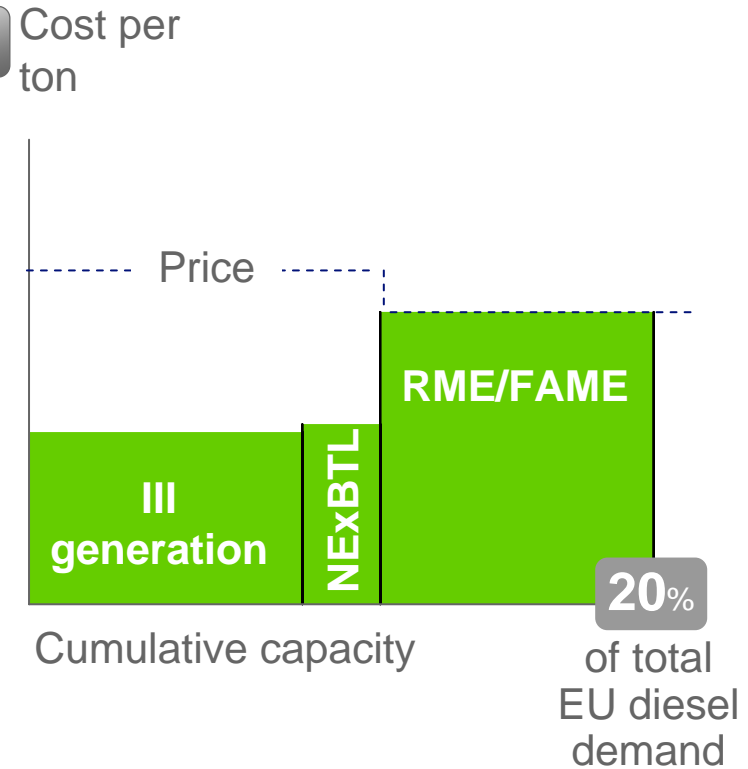
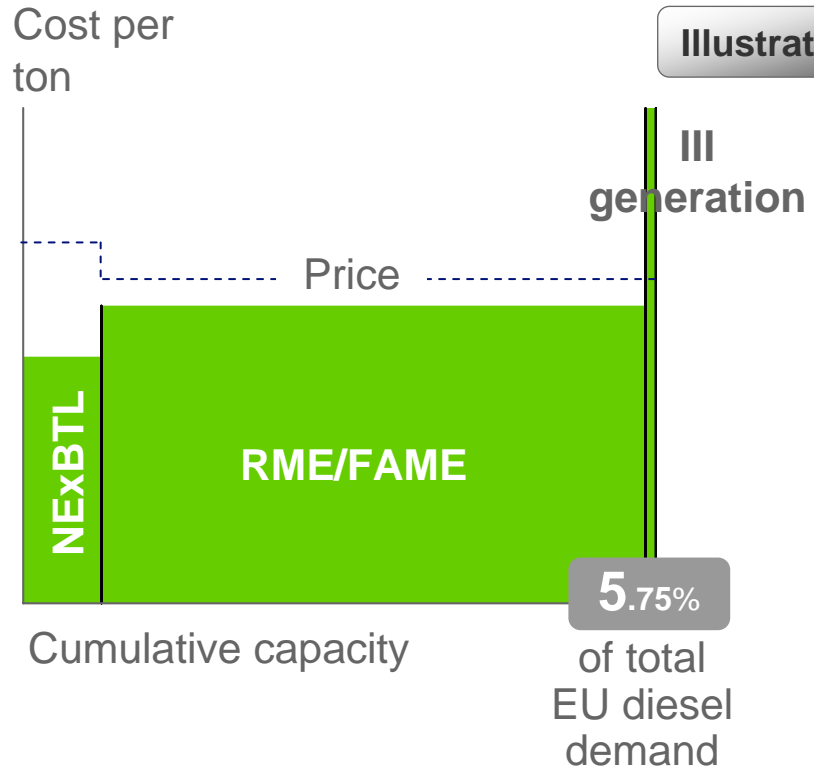
- Superior NExBTL technology gives Neste Oil a leading position
 - Feedstock flexibility provides cost advantage
 - Superior product quality creates premium price opportunities



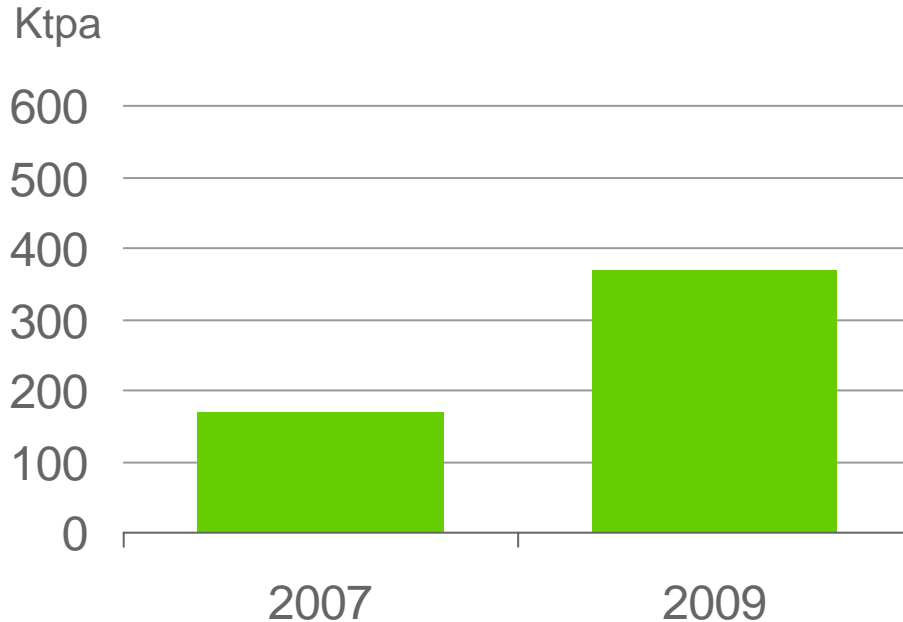
●●● NExBTL is expected to remain competitive

Supply curve in 2010

Supply curve in 2020



Short-term capacity estimates



Long-term target

World's leading biodiesel producer

- Biodiesel plant under construction at Porvoo
- JVs with Total and OMV

Note: Estimates are based on installed plant capacity; Neste Oil's share depends on JV arrangements



- We have a global ambition to move to large scale plants
 - Significant scale-up from Porvoo biodiesel plant
 - Plants can be constructed in Europe, Asia and North America
- We enjoy economies of scale whereas first generation plants have limited economies of scale
 - Limited feedstock availability
 - Logistics constraints



Product side partnerships

- With national champions
 - Local market information
 - Offtake agreements or joint ventures

Feedstock partnerships

- With feedstock processors/suppliers
 - Sustainable access to key feedstocks

Other partnerships

- Strategic partners
- Financial partners





- Emerging biodiesel market offers considerable growth for years to come
- We have a unique position to capture a significant share of the growth
- We will approach opportunities through large scale plants and partnerships
- We target to be the leading producer of biodiesel

