Amyris overview

Founded in 2003 to develop high impact solutions for significant, challenging, and global problems using advances in molecular, cell and systems biology

Initial focus: provide affordable anti-malaria drugs to developing countries

- Three-way collaboration between Amyris, U.C. Berkeley, and the Institute for One World Health; funded by the Bill and Melinda Gates Foundation
- Project goal: to reduce by 90% the production costs of artemisinin-based anti-malaria drugs
- Have met all technology milestones to-date
- On target to transfer our technology to a large scale manufacturer in late 2007
- Expect that microbially-derived drugs will be made available in 2009, helping to save 500k lives annually

Current focus: leverage proprietary technology platform to develop no-compromise bio-fuels

- Identified biomass-derived hydrocarbons that perform like conventional gasoline, diesel, and jet fuel and are compatible with existing distribution infrastructure and engines
- Produced these hydrocarbons in the lab; continue research & development to improve yield for large scale production
- Began first phase of engine testing of fuel to confirm performance
- Planning to build pilot plant in early 2008
- Expect to introduce our first bio-fuel product in 2010

Industry-leading capabilities

Personnel:

70 Full Time Employees (60% technical, 32% Ph.D.)

Multidisciplinary group:

Chemical Engineering, Microbial Physiology, Biophysics, Genetics, Analytical Chemistry, Organic Chemistry, Computational Biology

Facilities

State-of-the-art 15,000 sq-ft lab

5,000 sq-ft office

Biology Labs

Strain engineering

Synthetic biology

Fermentation Labs

Industrial development

100 liter scale

Chemistry Labs

Chemical synthesis

Process chemistry (kilo scale)

Producing better biofuels from existing production plants and feedstocks

- **Cost competitive** to petroleum-based fuels
- Expect to introduce first Amyris bio-fuel product in **2010**

Amyris Technology

Renewable feedstocks

- corn
- sugar cane
- sugar beets
- cellulose
- other grains

Hydrocarbon bio-fuels

- Bio-gasoline
- Bio-diesel
- Bio-jet fuel

- Research on feedstock technology is complementary
- **Cellulosic** technology can “plug” right in

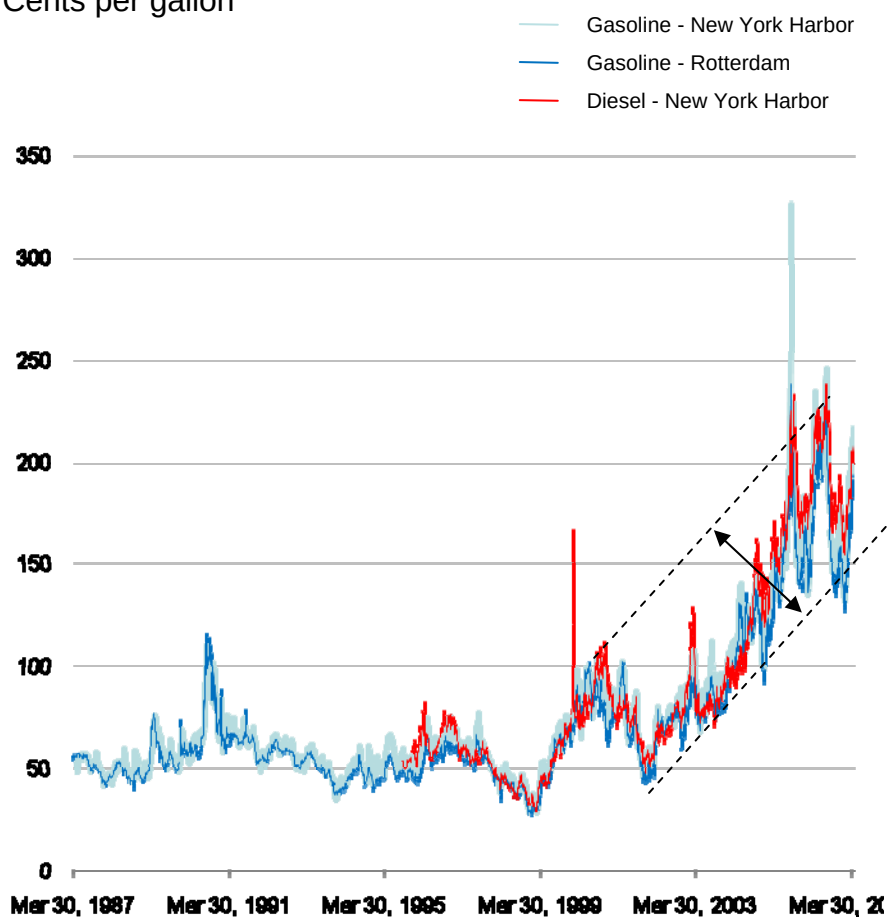
- Designed to be an environmentally friendly alternative to petroleum-based fuels with **no trade-offs**
- Fully **compatible** with conventional engines
- Completely **fungible** in existing distribution infrastructure

Global Transportation Fuel Industry Overview

Steady Growth Projection With Increased Price Volatility

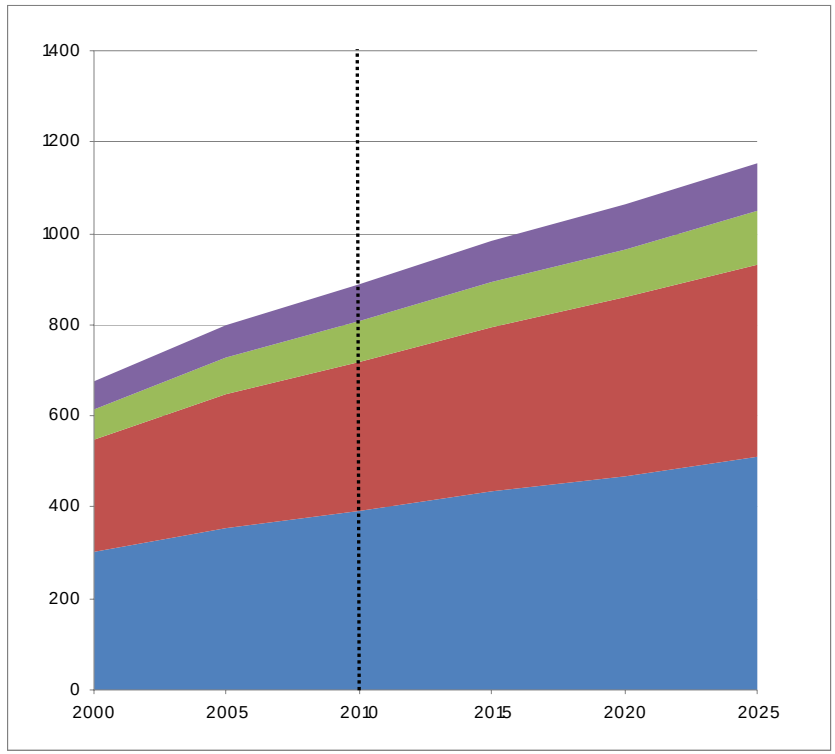
Significant increase in price and volatility over last 20 years have created opportunity for trading and supply optimization

Historical Transportation Fuel Price
Cents per gallon



Demand is projected to continue growing by over 2% annually through 2025

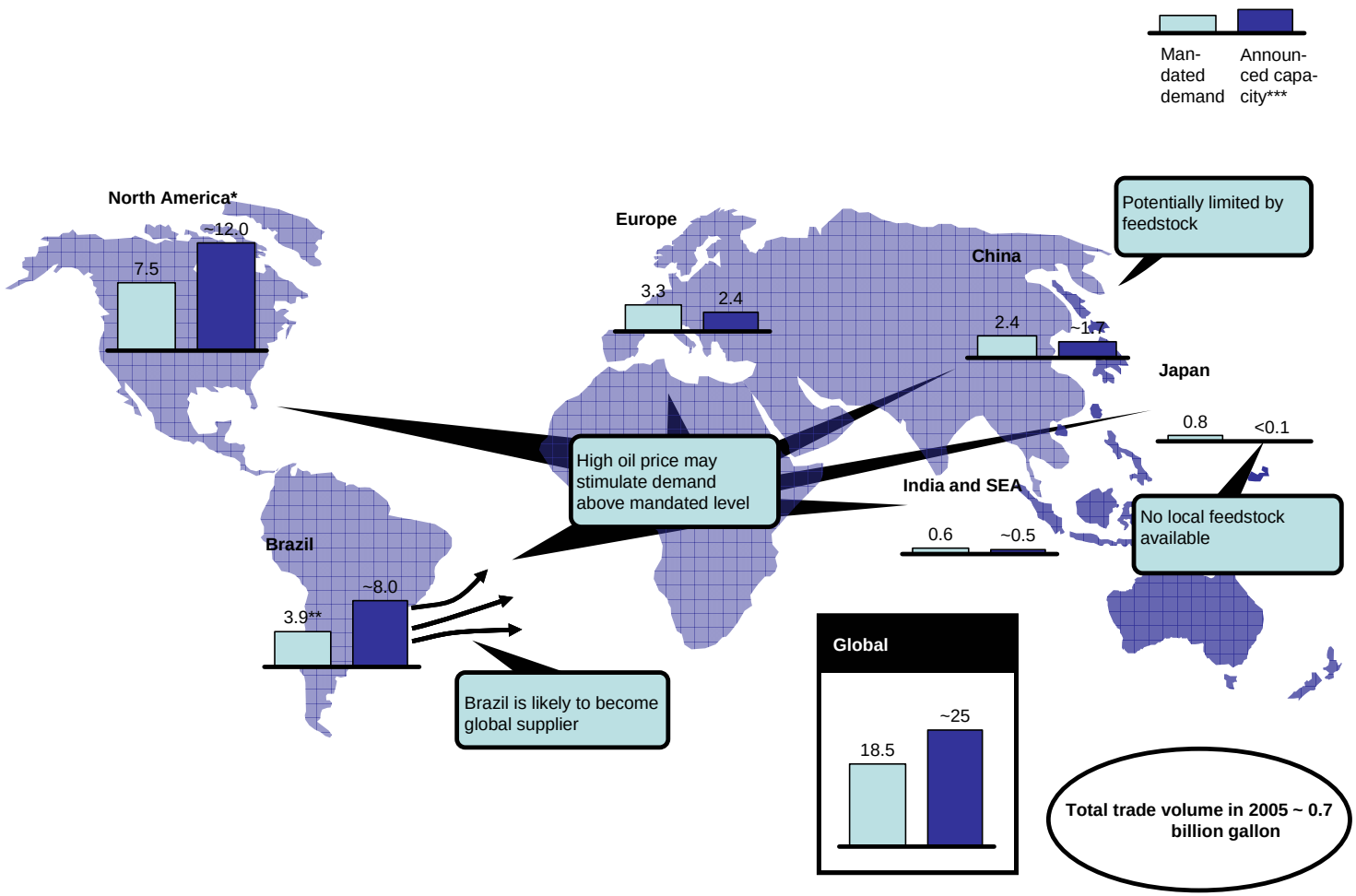
Projected global consumption of transportation fuel
Billions of Gallons Per Year



AMYRIS BIOTECHNOLOGIES

Global Trade In Bio-Fuels Expected To Emerge

Projected Bio-ethanol Volumes, 2010/12
Billion gallons



(1) N. America demand estimates could significantly increase if current renewable fuel legislation is passed;
Source: McKinsey & Company, 2006

Technology-neutral policies required to allow biofuels to achieve their maximum impact

1. Corn ethanol and conventional biodiesel provide a solid foundation for the biofuels industry, but neither adequately addresses climate change or energy security

2. Better biofuels, feedstocks, and production methods that overcome the key issues with current biofuels are available and/or are on the horizon

3. The cost and risk to achieve any penetration target for renewables will be significantly reduced if a broader range of technologies is introduced to the marketplace

4. Government mandates and financial incentives must be non-prescriptive, focused on desired attributes, and sufficiently long in duration

5. Product chemistry, feedstock, conversion process can be used as proxies to determine impact on desired attributes (e.g., GHG/mi, petroleum offset/mi), but should not determine qualification for incentives

California policy recommendations

1. Maintain and improve technology neutrality across all relevant legislation; focus on impact on greenhouse gas emissions and petroleum usage using life cycle analysis.
   - Ethanol vs. other biofuels
   - Biofuels vs. PHEVs, CNG, or other transportation alternatives
   - Transportation vs. power generation

2. Do not differentiate on the basis of feedstock or production geography
   - Hard to maximize usage (impact) while minimizing 1) cost to consumers, 2) cost to taxpayers, and 3) technical risk with geographic restrictions on feedstock or production

3. When appropriate, streamline approval process (multi-media evaluation) for new, high potential biofuels

4. No special benefits for biofuels that do not integrate with the existing infrastructure and vehicle fleet; renewable hydrocarbons are here today, and more options are on the horizon