

CleanTech Marketing Strategy

“PV” Target

OREGON
ECONOMIC & COMMUNITY
DEVELOPMENT DEPARTMENT

Core Strategy

October 2007



Discussion about Green Energy and Specifically Solar

Bob Ford, DEO & President, Solaicx

OREGON
ECONOMIC & COMMUNITY
DEVELOPMENT DEPARTMENT



Oregon Climate Change Leadership

- West Coast Five States Carbon Cap & Trade agreement
- Aggressive Renewable Energy Portfolio-25% by 2025 or an estimated 1,577 aMW by 2025
- Commitment to 100% renewable energy for State Government operations 50-75 aMW



* Currently in rulemaking at PUC

Carbon Cap & Trade

- *Governor Kulongoski "goal of reducing the state's greenhouse gas emissions 10 percent below its 1990 levels by 2020, and 75 percent below 1990 levels by 2050.*



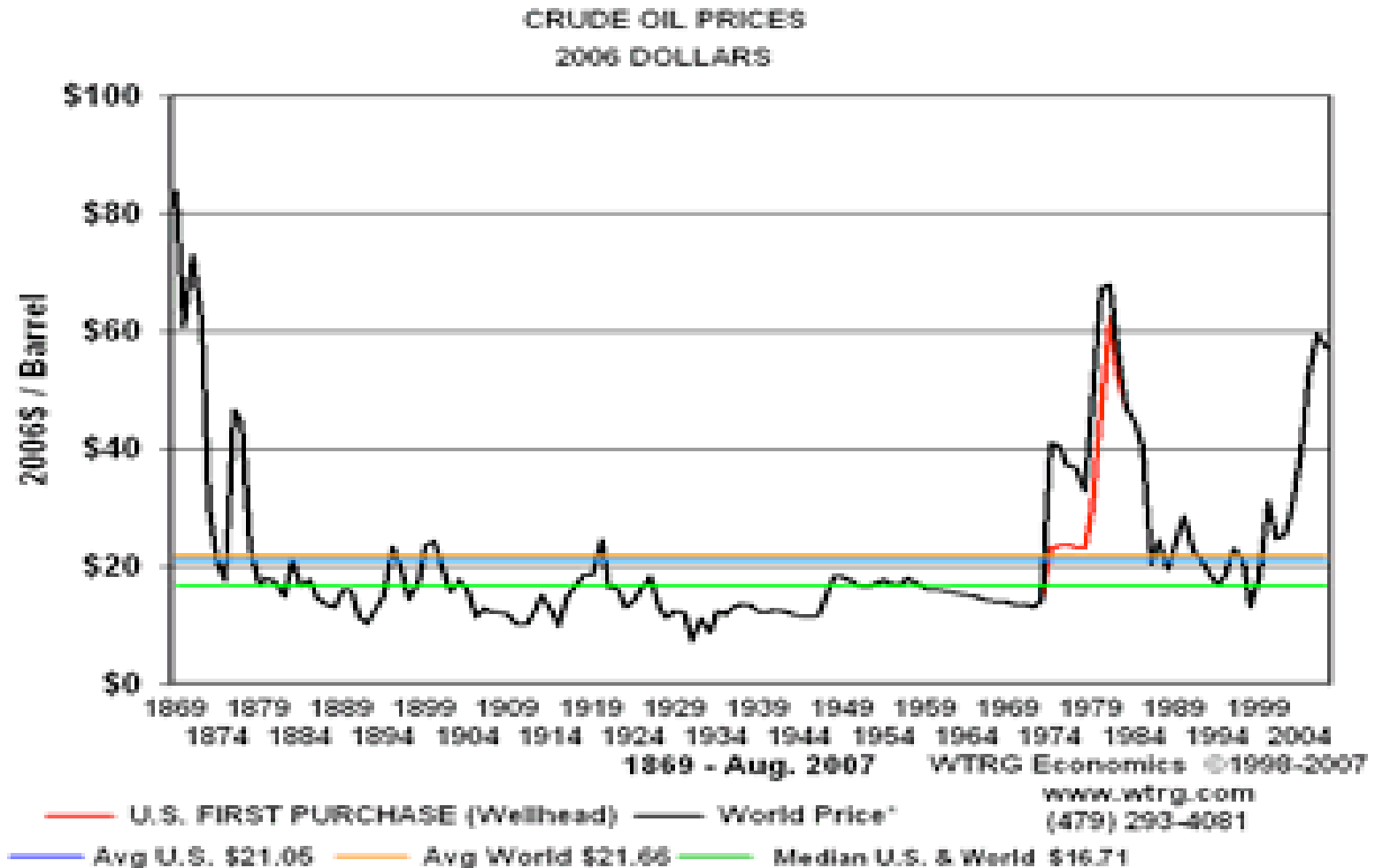
Supreme Court Ruling: EPA vs. MA

April 2007 CO₂ & other green house gases subject to EPA regulation under the clean air act

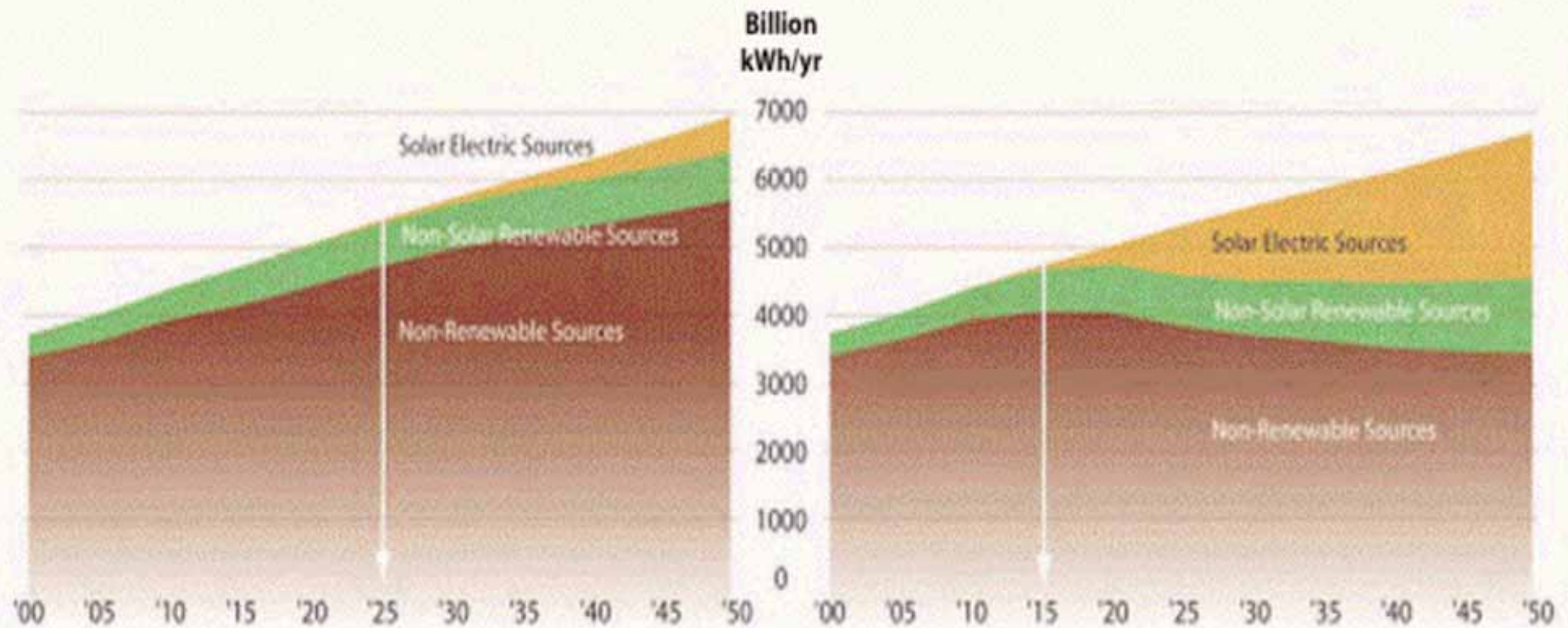
Energy Market Transition

Carbon Regulations 2 to 3 years

Rising Oil Prices \$78.81 NyMEX



Historic Market Opportunity




In an analysis performed by the National Renewable Energy Laboratory, generation of electricity (in billion kWh/yr) is shown from 2000 to 2050 under the Baseline scenario (left) and Aggressive Policies scenario (right). Generation is broken out for solar electric, non-solar renewable, and non-renewable sources.



Objective

Convert Green Energy = Jobs

“Rule of Thumb” 1,000 Megawatt
Green Energy Represents about
\$1 billion US capital Investment,
3,000 manufacturing jobs, 1,000
installation jobs



Cleantech is defined by the following eleven segments,

- Energy Generation
 - Energy Storage
- Energy Infrastructure
- Energy Efficiency/Conservation
 - Transportation
- Water & Wastewater
 - Air & Environment
 - Materials
- Manufacturing/Industrial
 - Agriculture
- Recycling & Waste



Oregon Key Targets

(at this time)

Energy Generation

Wind

Solar

Hydro/Marine/Wave

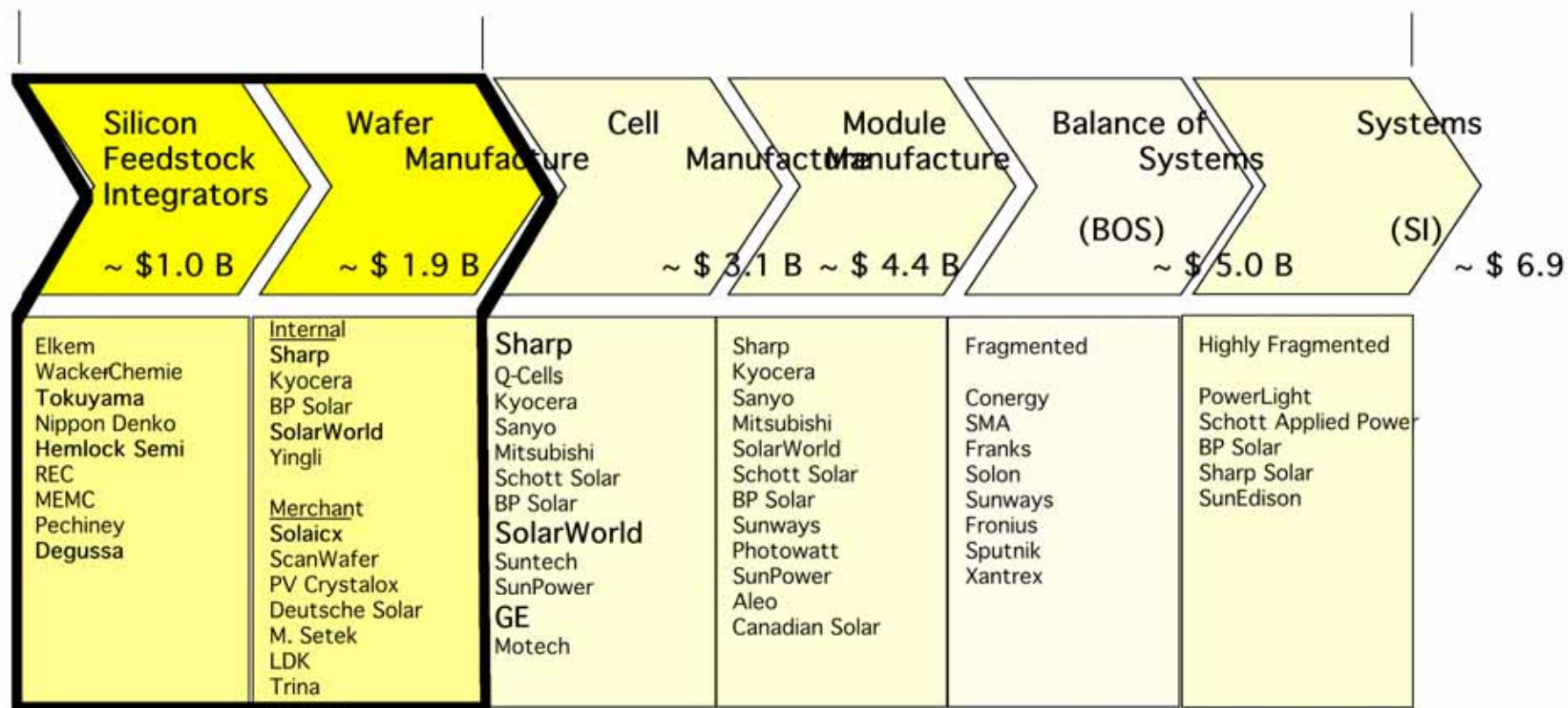
Biofuels

Geothermal

Other



SOLAR VALUE CHAIN & Suggested Targets



Source: Value Chain values derived from Piper Jaffray, Equity Research, Wall Street Research, "Solar Powered: An Emerging Industry," October 2005; CLSA Solar Power Sector Outlook, "Sun Screen II," July 2005; and based on analysis. Dollar Values represent manufacturers' market value. Companies are representative and not all-inclusive.



Worldmap of the PV Industry

161 factories in 32 countries

Publisher: Sun & Wind Energy
www.sunwindenergy.com

Layout: Sun & Wind Energy
www.sunwindenergy.com

Date: January 2007

Source: Manufacturers' information, Sun & Wind Energy

Capture:

- production site for crystalline cells
- production site for thin-film modules
- production site for devices modules
- production capacity at the end of 2006 in MWp
- production capacity at the end of 2007 in MWp

Examples:

First Solar The first silicon cell producer with a production capacity of 42 MWp at the end of 2006, along with a module capacity of 41 MWp. At the end of 2007, the production capacity for cells are forecasted to reach 60 MWp. The production capacity for modules will reach 45 MWp.

Selection of locations:

The map shows PV manufacturing with a total annual capacity of 16 MWp for cells and/or modules at the end of 2007. Sun & Wind Energy is a subsidiary of Sun & Wind Energy International. Because information only one or no company could show up in these countries, its data is for

Mr. Bob Ford, CEO/President

OREGON
ECONOMIC & COMMUNITY
DEVELOPMENT DEPARTMENT

