

# Solar Institute Energy & Emission Science

# Guiding Market Reform Facts/Brief

# Solar Institute

Energy & Emissions Market Reform For All Industry Sectors



Top 'Manufacturer' Choice

## **Global Greenhouse Gas Emissions**

Major Detrimental Factors & Most Effective Abatement Activities

 Timber – Use Alternative Materials
 Buildings – Modify to Save Energy
 Transport – Minimize Travel Distance (use local supplies)

# Global Greenhouse Gas Emissions Total: 42.9 Gt CO2 e / Year



GHG Emissions (Gt CO2 e) / Year

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Derived from 2002 GHG Emissions (Vattenfall 2007)

## GHG Reduction Potential (Gt CO2e)



legislation by 2030 (Vattenfall 2007)

# Emission Reduction Potential (Gt CO2e)



Annual Abatement Potential (Total 27 Gt CO2 e) by 2030, to prevent >2 degree temperature rise; need to limit 2030 GHG Emissions to 31 Billion tonne / yr (Vattenfall 2007).

# **Carbon Abatement Potentials Clarified**

If 20% of All Power is Renewable Energy

**Reduce Deforestation** 

**Increase Forestation** 

Emission Reduction

= 1.5 Gt CO2e/yr

= 3.3 Gt CO2e/yr

= 3.5 Gt CO2e/yr

# Product & Services Impact (LCA)



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European Commission 2003 STUDY ON EXTERNAL ENVIRONMENTAL EFFECTS RELATED TO THE LIFE CYCLE OF PRODUCTS AND SERVICES.

Procurement Market (Australia)

Retail & Wholesale Revenue: \$650 Billion/yr

Procurement Reform of 1.7%: \$10 Billion/yr

Retail Revenue: \$292.3 Billion/yr

Wholesale Revenue: \$354.2 Billion/yr

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(Australian Bureau of Statistics 2006)

# Market Reform Required

For the Procurement of Top Efficient Product Options In All Industry Categories

## Recommended by:

 \* UK Government Procurement Action Plan
 \* European Union No. 1 Action Requirement for Climate Change

## **Procurement Reform of Efficient Products**

There is a Great Need for Market Reform in Procurement of Better Products for Climate Change Action

(British Council 2009, EU Action Plan 2006)

 SI says:
 "Unfortunately – No comprehensive protocol, assessment or annunciation to Markets of products/ion efficiency for all industries is in place yet.
 Only SI has the advanced and expedient local and global action plan to join suppliers to buyers."

# **Solar Institute Functions**

Product Life Cycle Assessment / Review
Labels
Web Suppliers
Local & Global Market Promotions
Local & Global Sales

# Simple & Formal



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(World Economic Forum 2009- Supply Chain Decarbonization)

# SI Labels & Web Local and Global Sales





Top 'Manufacturer' Choice

### SI Product Procurement Guide



# **Building the SI Procurement Guide**





Example: Toyota Prius

# SI Participation Now For Fast Change to Consumption Trends



# Market Reform a Reality

Become SI Supplier & Buyer

Email: join@solarinstitutelcaceo.com OR Register Online (Via SI Store Registration)