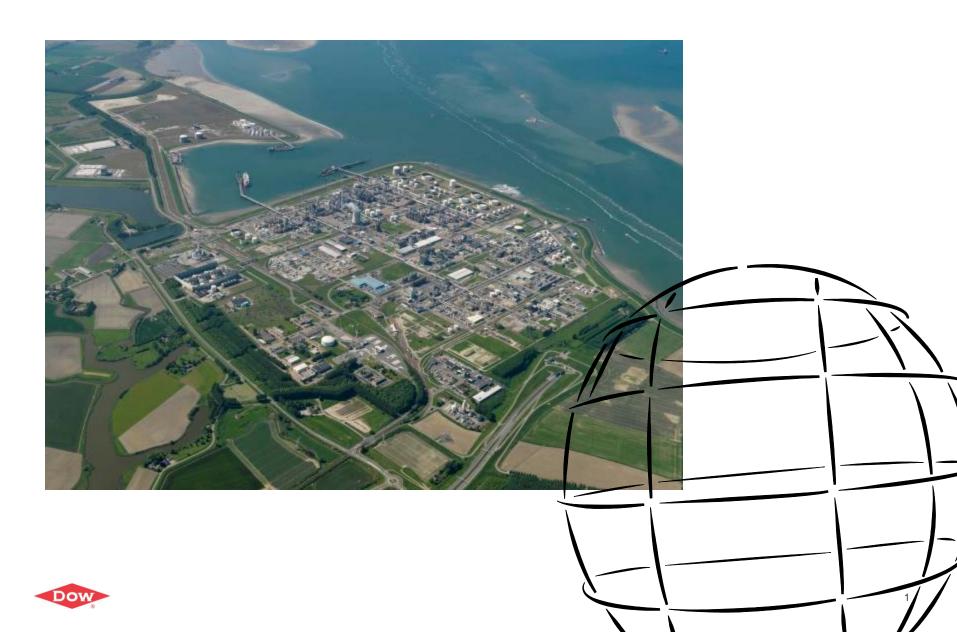
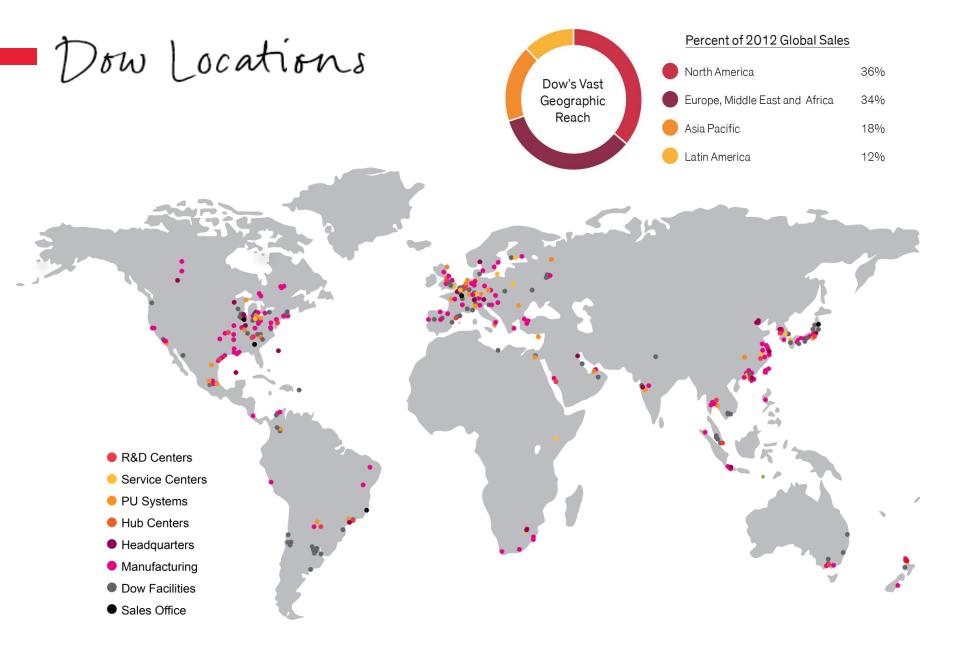
#### **Energy in chemistry: Dow Benelux**







## The manufacturing sector and its effects on job creation

- •The European Commission estimates manufacturing generates 25% of all private sector jobs in the EU
- •80% of private sector R&D
- •75% of all EU Exports



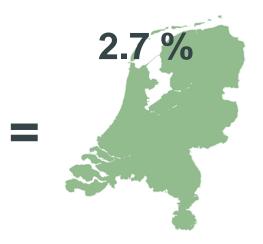
Manufacturing spurs new jobs like no other in economy: creates on average **5 to 8 jobs** downstream



#### **Dow's impact regarding Energy and Cost**









#### **Developments in Energy Market**

## Shale gas exploration changed the energy market drastically

- Strongly stimulating American Industry
- · Lower price of coal
- Changes the balance between energy producing and energy consuming countries
- Stop on search for sustainable energy sources

#### European regulations on GHG emissions

- Administrative burden
- No incentive for energy efficiency
- No support outside Europe > no level playing field



# Affordable energy enables competitive EU manufacturing

- •EU Manufacturers need:
- Affordable energy for our production
- •A clear view on the additional cost caused by heavy involvement in renewables

Exploration of additional sources for energy supply such as

shale gas

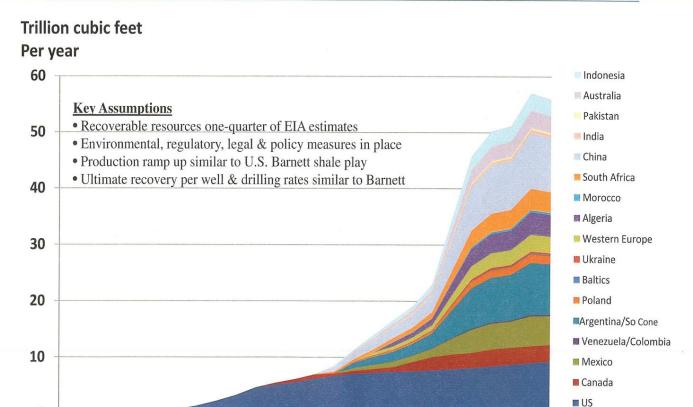
#### Did You Know?

Today, globally, the world's population consumes about 4 times as much oil as we discover.



#### Forecasted development Shalegas

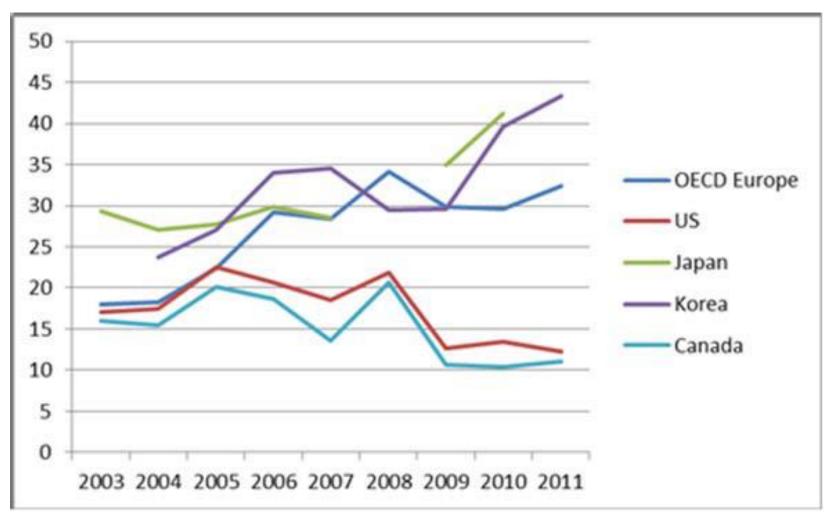
#### Possible Impact on Global Gas Market







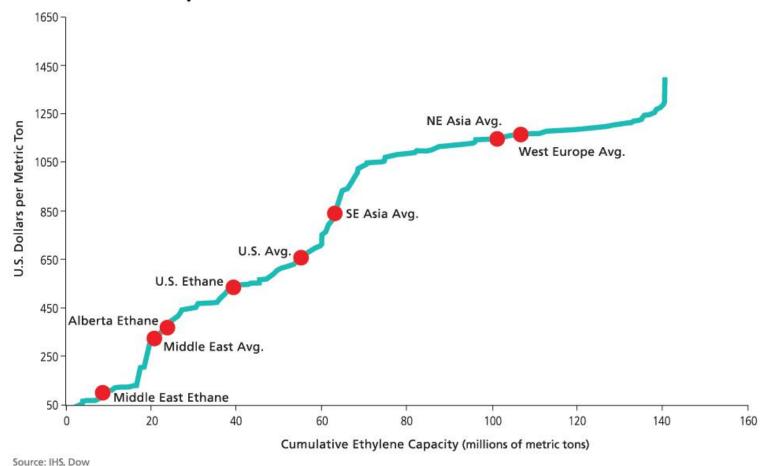
#### Imapact of Shalegas on Industrial gas prices (EUR/MW)





#### Impact of Shalegas on Dow's feedstock position

### Global Ethylene Cost Curve





#### **European Energy intensive manufacturers need:**

- Affordable energy for our production inside the EU
- Consistency of EU energy and climate policies, no overlapping policies and harmonized EU implementation in all EU Member States
- Completion of the internal energy market
- Promotion of research, development and manufacturing of renewable technologies in order to drive down costs of renewable energy
- A clear view on the additional cost caused by heavy involvement in renewables
- Exploration of additional sources for energy supply such as shale gas