



## The global chemical industry...

- ...prepares for the future by **investing in research** to develop and implement **new technologies**.
- ...produces solutions that enable other industries and sectors to improve their **environmental performance**.
- ...focuses on **improving the quality and efficiency** of products throughout their life cycle.
- ...enables products to perform to the **highest standards** during their lifespan, while reducing their carbon emissions.

- ⇒ Innovation, research and development, and climate technologies are essential to global climate mitigation and adaptation.
- ⇒ Continued innovation requires a long-term, stable and reliable framework for R&D and deployment, with appropriate funding and support.
- ⇒ Legislators and industry partners should support the chemical industry's efforts to innovate and promote regional and global technology development and cooperation.
- ⇒ A mechanism to enhance technology sharing among the developed, emerging and developing world could create positive business opportunities for all parties.
  - ◇ This would require: 1) appropriate financial incentives, such as a non-market mechanism under UNFCCC, to compensate for risks; 2) effective intellectual property protection; and 3) a continued focus on innovation.

## Innovative chemistry makes energy and climate change solutions possible:

- Insulation foams in building save **2.4 billion tonnes of GHGs**. Efficient insulation can reduce energy costs by as much as **60%**.
- Chemical products for vehicles save **230 million tonnes of GHGs**. Emissions can be reduced through lighter plastic parts that reduce a car's weight, tires that create less emissions and gasoline and diesel additives that **improve energy efficiency**.
- Modern compact fluorescent lamps offer more effective lighting and have a longer lifetime than incandescent bulbs, saving **700 million tonnes of GHGs**.
- A major breakthrough in plastics manufacturing is metallocene catalyst technology, which makes polyethylene films stronger and lighter, **lowering direct emissions**. Metallocene polymers also enable modified plastics to be used more widely in automotive applications, replacing steel.

### The Role of the Global Chemical Industry in:

#### *Innovation*

Innovative chemistry solutions enable products to perform to the highest standards during their lifespan, while reducing their carbon emissions

#### *Low Carbon Economies*

ICCA's contribution and commitment is twofold:  
1) Improving efficiencies of energy use during chemical manufacturing processes.  
2) Developing and producing products that enable cross-sector emission reductions.

#### **ICCA**

The International Council of Chemical Associations (ICCA) is the world-wide voice of the chemical industry, representing chemical manufacturers and producers all over the world. It accounts for more than 75% of chemical manufacturing operations with a production exceeding USD 1,6 trillion annually. ICCA promotes and co-ordinates Responsible Care® and other voluntary chemical industry initiatives.

<http://www.icca-chem.org/>