

## **Principles for Global Policies to Reduce Greenhouse Gas Emissions**

The Chemical Industry and Climate Change



ICCA, the worldwide voice of the chemical industry, has developed a set of eight policy principles to help guide post-2012 global climate discussions.



# ICCA'S EIGHT PRINCIPLES FOR REDUCING WORLDWIDE GHG EMISSIONS

## 1 **Develop a global carbon framework to accelerate greenhouse gas (GHG) reductions, avoid market distortions and minimize carbon leakage.**

A global framework is needed to reduce the risk of market distortions and the movement of industrial production and GHG emissions from one nation to another – known as ‘carbon leakage.’ This framework, covering all greenhouse gases, should be harmonized for global markets in order to deliver a sound environmental outcome, maintain fair competitiveness, and ensure transparency and cost predictability.

## 2 **Focus on the largest, most effective and lowest-cost abatement opportunities.**

To reduce GHG emissions as quickly and substantially as possible, while ensuring the competitiveness of the industry, policies should encourage widespread use of measures with the greatest emission reduction impact for the least cost. Policies should include incentives for use of GHG-saving products and materials; focus on scale, cost and implementation speed; and support research and development in innovation.

## 3 **Push for energy efficiency.**

Improving energy efficiency is a highly effective way to reduce GHG emissions. Policies should focus on major (rather than marginal) efficiency improvement opportunities, support research and development, and provide incentives for consumer and industry adoption of new energy and resource efficiency measures. National, regional and global energy efficiency standards, including the use of the chemical industry’s innovative products, should be considered. A recent study found that for every for every unit of greenhouse gases (GHG) emitted directly and indirectly by the chemical industry, the industry enables more than two units of emission savings via products and technologies provided to other industries and consumers. The industry has significant additional mitigation potential by 2030. (For the full report and additional materials, see <http://www.icca-chem.org>).

## 4 **Support the development and implementation of new technologies.**

New technology is essential to help the world economy slow, stop, and reverse the growth of greenhouse gas emissions. Policies should support significant funding for research and development and encourage the use of performance targets to help ensure that effective solutions are implemented, rather than stipulating specific technologies. The important role of chemistry products should be reflected in these programs. A framework should be established for effective protection of intellectual property rights that allows fast sharing of technology breakthroughs.

## 5 **Support the development of the most efficient and sustainable use of available feedstocks and energy.**

Policies should promote improved energy and GHG efficiency rather than restrict the use of a specific energy raw material, or “feedstock.” Policies should recognize the vital role of fossil fuel feedstocks for the chemical industry, including their use in the manufacture of energy-saving materials; support research, development and infrastructure for renewable feedstocks; and consider energy security and energy diversity needs. Needed technology development eventually will be driven by the market. Energy diversity can be supported through government action, including energy efficiency measures, renewable supplies (including biological sources), and nuclear technology.

## 6 **Provide incentives for faster action by rewarding “early movers” that proactively reduce their carbon footprint.**

Policies should reward those who have invested in technology to implement GHG emission reduction measures and provide measures to accelerate action by those that have fallen behind, while not jeopardizing investments made by “early movers.” These policies should use cost performance-based measures (as opposed to political considerations) when identifying technologies to support.



The chemical industry recognizes its responsibility to contribute to efforts to reduce greenhouse gas (GHG) emissions. The industry's goals in this regard are to reduce its own emissions by improving its processes and to encourage the use of chemical products that create a net emission reduction along the value chain.

An ICCA study, titled "Innovations for Greenhouse Gas Emission Reductions" and published in July 2009, found that for every unit of greenhouse gases emitted directly and indirectly by the chemical industry, the industry enabled more than two units of emission savings via the products and technologies provided to other industries and consumers.

#### **7 Push for the most efficient and sustainable disposal, recovery and recycling options.**

Disposal methods for chemistry-based products (e.g., landfill, incineration with or without heat recovery and recycling) are unequal across regions, which has a significant impact on total emissions over the life cycle of a product. Policies should support the development of new technologies and practices that ensure that the most efficient and sustainable disposal, recovery or recycling options are implemented. (For example, by using the "stored energy" in chemical products such as plastics.)

#### **8 Develop technology cooperation to support abatement in developing countries.**

GHG emissions reduction efforts can affect production costs, leading to concerns about the impact of technology cooperation on competitiveness. To realize the GHG emissions savings potential globally, policies should ensure a level playing field for industry by introducing comparable or complementary efforts for GHG reductions in all regions of the world, recognizing regional differences and priorities, and offering incentives for capital-intensive measures to accelerate emissions reduction. A technology cooperation mechanism between the developed and developing world could benefit both technology owners and receivers.

"Innovation in the chemical industry can help the world transition to a low-carbon economy."

Satoshi Kawachi, Sumitomo Chemical Co.,  
Chair of the ICCA Energy and Climate Change Leadership group

"If industry, policymakers and other stakeholders take steps to facilitate emissions reductions and fully utilize chemical products, the study suggests the ratio of emissions savings to emissions could increase to more than '4 to 1' by 2030."

Hubert Mandery, ICCA Council Secretary

"This study highlights the vital role of the chemical industry as enabler of solutions to decarbonise the global economy by making products that save energy and create a net emission reduction along the chemical value chain."

ICCA President Christian Jourquin, CEO of Solvay



### **About the “Innovations for Greenhouse Gas Emission Reductions” study**

McKinsey & Company, the global management consulting firm, conducted independent analyses and overall project management for the study, which examined the global chemical industry’s impact on greenhouse gas emissions through the life cycle of chemical products and the difference they make in the applications they enable. The Öko Institut, a leading independent environmental research and consulting institution, conducted a critical review of the analysis and reviewed the calculations. The chemical industry is the first global industry to embark on such an initiative.

### **About ICCA**

The International Council of Chemical Associations (ICCA) is the worldwide voice of the chemical industry. ICCA members come from countries that account for more than 70 per cent of global chemical manufacturing operations. Chemicals management, international climate negotiations, government and business partnerships, regulatory affairs, stakeholder outreach, advocacy and communications are key areas of focus. The Council also promotes and co-ordinates Responsible Care®, the industry’s unique global initiative that drives continuous improvement in health, safety and environmental (HSE) performance, and other voluntary initiatives advancing best practices within the industry.

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