



AN OPEN LETTER TO THE FIELD OF 2008 PRESIDENTIAL CANDIDATES  
FROM STUDENTS OF CARNEGIE MELLON

# CHANGE OUR COURSE AND LEAD THE WORLD

Dear Candidates:

Providing sustainable energy is a critical challenge facing society today and your position as the next president has the potential to substantially impact future generations. However, energy and sustainability issues have received little attention on the campaign trail. Our current energy system predominately uses fossil fuels that emit carbon dioxide and other greenhouse gases. Many scientists recommend reducing these emissions to 80% below 1990 levels by 2050 in order to prevent the globally irreversible consequences of climate change. Energy used by transportation, homes and businesses, and industry each constitute about one third of the overall United States carbon emissions. Emissions reductions can be achieved through efficiency and conservation, proliferation of low-carbon energy, and stronger leadership in national and international carbon policy. In order to move the nation towards a less carbon-intensive system, it is imperative that you detail your plans to transition the country to an economically competitive and environmentally sustainable energy future.

In every campaign season, stump speeches inevitably include promises of reducing oil dependence and developing a sound energy policy. In the shadow of these promises, oil imports continue to rise and our transportation system remains overwhelmingly powered by petroleum. How should we rapidly diversify our transportation fuels to next-generation biofuels and electric-powered travel?

As the next president, you can direct effective energy policies that encourage efficiency and conservation in homes, businesses, and industries. Reducing energy consumption in these areas would lower energy bills and enhance American competitiveness in the global marketplace. What types of incentives and regulations would you create to promote conservation and efficient energy use?

Advanced energy technologies will require a large investment in research and development to encourage market adoption. Innovative entrepreneurs are ready to introduce next generation energy systems, and policies that pull new energy technologies to the market would kick start the transition. We need to integrate these smart technologies into the electricity grid and make low-carbon power plants the status quo. Renewable energy sources, such as wind and solar power, only provide about 1% of our electricity supply. We envision a low-carbon energy portfolio that will require a massive scale-up of renewable energy, solutions to address nuclear waste disposal, as well as capturing and storing greenhouse gases from conventional power plants. What steps will you take to move us towards this low-carbon future?

Reformulating our energy policy will also require a strong and integrated carbon policy. Even though some states are unifying their efforts to curb carbon emissions by adopting regional initiatives, these are few and far between. Although voluntary or regional efforts are helpful in reducing emissions, federal regulations are imperative in order to meet the national targets needed to avoid irreversible climate change. The federal strategies that can be pursued range from market-based mechanisms, such as cap-and-trade schemes, to a single carbon tax, to an individual carbon allowance, like a "carbon credit card." Which strategies will you pursue to develop a consistent federal policy to lower carbon emissions?

Creating an integrated carbon mitigation and sustainable energy policy would ensure the ability of future generations to meet their needs. Currently two billion people in the world have little or no access to electricity. Access to energy would improve public health and better the standard of living among the world's poorest citizens. Providing technologies that produce sustainable energy at the local level will empower communities and alleviate pressure on energy supplies. The technologies created here can considerably improve living conditions in developing countries. How do you plan to encourage the technology transfer necessary to promote global environmental stewardship?

People perceive that sustainable energy and economic growth are incompatible. However, this view fails to account for the long-term effects of climate change. The Stern Review, a recent report on this subject, states that the cost of inaction is likely to range from 5–20% of global GDP per year in the long term compared to the costs of preventative action at merely 1% of global GDP. By investing in a sustainable energy system, we would also create a new local "green-collared" economy. What specific strategies would you use to facilitate green economic growth?

Currently, America has one of the largest carbon dioxide emissions per capita. Countries like India and China are adopting our consumption culture and could increase their per capita carbon dioxide emissions to mimic ours. Tackling the climate change problem under these conditions will become a daunting task. Our policies at home will have a strong cascading effect on international energy and carbon policies. You need to encourage green globalization in order to curb emissions and provide energy to the rapidly growing world population. America is positioned to lead on this front and change the course of the future. As president, your next four years are crucial in shaping the evolution of humanity. The world is yearning for an alternative and sustainable solution. **Change our course and lead the world. We are waiting.**

**Carnegie Mellon**

Sincerely,

**Shahzeen Attari**  
Engineering and  
Public Policy & Civil  
and Environmental  
Engineering  
Class of 2009

**Inês Margarida Lima  
de Azevedo**  
Engineering and  
Public Policy  
Engineering  
Class of 2009

**Benjamin Flath**  
Civil and  
Environmental  
Engineering  
Class of 2008

**Constantine Samaras**  
Engineering and  
Public Policy & Civil  
and Environmental  
Engineering  
Class of 2008

This open letter was inspired by a competition between college and university students attending member schools of the Association for the Advancement of Sustainability in Higher Education (AASHE). The competition, dubbed TEAMS for Tomorrow's Energy Ambassadors, Managers and Scholars, invited students at more than 200 schools to write a "call to action" letter to the field of 2008 presidential candidates. The top ten letters were then independently judged by editors of *Environmental Design + Construction*, *Greener World Media*, *IndustryWeek*, *Mission Critical* (formerly *Energy, Power & Management*), *Newsweek* and *Sustainable Facility* magazines. Congratulations to the students of Carnegie Mellon University for their winning entry. Well done! Johnson Controls cordially invites the candidates to address these students' concerns directly at the 19th Annual Energy Efficiency Forum in Washington, DC held June 10–11, 2008. For more information about TEAMS, contact [be\\_smartenvironments@jci.com](mailto:be_smartenvironments@jci.com).

**Johnson  
Controls** 

INGENUITY WELCOME