

Energy Quarterly

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Energy outlook: A perspective from the new generation of materials researchers

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As part of the October 2011 World Materials Summit and Student Congress—an international gathering of present and future leaders of science, technology, and policy—we participated in discussions of global challenges on energy, sustainability, and water. We began the Student Congress with a tour of the U.S. Capitol building. Atop this magnificent structure sits the bronze Statue of Freedom. She stands on an iron globe inscribed with the phrase E pluribus unum.

These words defined the Congress, comprised of students and postdoctoral fellows from many parts of the world, charged with contributing to a single declaration on the pressing concerns of energy. This declaration is to be presented to the materials research community and the public in general.

The magnitude of the task necessitates coordination among nations, and nations do not always agree. Raw materials, monetary resources, and technological capability are not distributed evenly. Thus some participants argued strongly for renewables such as wind and solar, while others pointed to the scalability of nuclear and coal. Given the diverse set of opinions and realities we represented, no final consensus was reached, nor was it expected. Everyone understood that these regional and national differences do not preclude us from working together for a more sustainable world.

In the end, our group of 45 participants in the Student Congress reaffirmed that as scientists, we are obliged to sensitize and inform ourselves, the public, and the people who represent us in government. When the Summit reconvenes in Paris in 2013 and judges what we managed to accomplish, perhaps its participants can look to La dame de fer for further inspiration and guidance.

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