

WORLD PUBLIC FORUM “DIALOGUE OF CIVILIZATIONS”

September 9-13, 2008, Rhodes, Greece

Declaration on Energy and Nanotechnology

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on behalf of Panel 8*

Background

The World Public Forum is a deliberative-consultative body that convenes representatives of government, business sector, NGOs, and political, intellectual, and spiritual elite from different countries and cultures for constructive, creative, and action-oriented dialogue for building a better future for humanity as a whole. The Forum creates a space for developing partnerships and finding common language, mutual understanding and trust for addressing the most stringent issues of the modern society by respecting cultural sensitivity. It is supported by His Majesty Abdullah II, King of Jordan, Ali Abdallah Saleh, President of Yemen Republic, Koichiro Matsuura, Director-General of UNESCO, Prime-Minister of Russia Vladimir Putin, Sonia Gandhi, Indian National Congress Party Chairman, His Holiness Alexy II, Patriarch of Moscow and All Russia, Dr Badr al-Din Hassoun, Grand Mufti of Syria, Walter Schwimmer, former Secretary General of the Council of Europe, UNESCO, Council of Europe, OPEC, OIC, ISESCO, ALECSO, scientific experts and hundreds of individual participants.

At the World Public Forum “Dialogue of Civilizations” held September 9-13, 2008, in Rhodes, Greece, the Russian Node of the Millennium Project, with the Millennium Bank, and contribution of the Planning Committee of the Millennium Project organized a discussion around the Modena initiative, focusing on global energy security and potential future issues related to nanotechnology. Following is the message prepared on behalf of the whole panel by Dr. Paul Werbos (key speaker of the panel) and Dr. Nadezhda Gaponenko (organizer, chair and key speaker of the panel) and presented at the Forum’s closing plenary session by Dr. Paul Werbos.

The Declaration

The Modena initiatives panel was an *action-oriented* dialogue of people from a variety of sectors – government, academia, private sector, and nongovernmental organizations. There were 19 presentations from speakers from different parts of the world, especially Russia and North America, concerning energy and nanotechnology. There was also a video-conference connection with the Director of the Millennium Project of the World Federation of United Nations Associations, Jerome Glenn, and a film on the future of nanotechnology.

The panel was searching for new ways to develop collaboration and provide *concrete progressive suggestions* for advancing the global interests of all humanity. It was a major conclusion that concrete progress also requires a great extension of the dialogue process itself, which is necessary in order to obtain realistic good results in view of the vast complexity of technologies, human motivations, and rapid change.

¹ These views represent the outcome of panel 8. They do not represent the official views of any of the organizations we are affiliated with.

Actions for providing global energy security and sustainability

Conflicts—limited supplies of oil and other fossil fuels have already created great damage and risk to humanity. To achieve long-term sustainability and a more progressive global situation, we must reach a new substructure of world production. To make this revolution smoothly and at minimum cost, we must find trajectories of development which provide greater opportunities and benefits to all regions of the world – oil producers, gas producers and consumers of oil and gas. Many good changes have happened in recent years, but these are not yet enough to offset negative trends in resource competition, environment and nuclear proliferation **which threaten the very existence of all humans on earth.**

To change these dangerous trends, the first requirement is more effective and more complete research and development of new technologies in directions which present serious promises to “change the game.” Many panelists argued that we should have a **new energy R&D agency** under a new, **inclusive International Energy Agency within the UN**, to serve three purposes: (1) to offer new possibilities for international collaboration; (2) to provide new funding; and (3) to have a funding mechanism independent of those vested interests which have limited the effectiveness of existing R&D.

All panelists agreed that better flows of technology and market information will be essential in order to overcome the negative effects of filtered information and vested interests which have limited accomplishments in previous energy R&D efforts, even though those efforts are very valuable within a certain narrower focus. To create these new flows of information, it is necessary to **create a stronger real-time system of international dialogue**, taking advantage of the Internet and other new information technologies. For this, a concrete plan was suggested by the Millennium Project of the World Federation of United Nations Associations. This system (GENIS—Global Energy Network and Information System) would start from some initial new computer-based dialogue system designed in Silicon Valley, which would be enhanced with major fundamental functions and contributions for which the Russian Node of the Millennium Project could provide some essential leadership.

Many additional concrete suggestions were made, such as: (1) we should form a new international consortium, modeled on the past success of Intelsat, to realize the potential of space solar power and less expensive access to space, to be available to *all* the nations of the earth; (2) international cooperation to reduce natural and man-made threats to offshore oil and gas facilities – in other words, those of us who are building offshore oil and gas platforms should work together to protect and help each other; and (3) new systems to allow remote natural gas owned by Russia to contribute much more to the large and expensive market for automobile fuel – for example, new catalytic gas-to-liquids technology could allow Russia to make more methanol from a given volume of remote gas, and promote faster deployment of flexible cars which can burn methanol-based fuel as an alternative to gasoline or ethanol.

Actions for promoting nanotechnology and advancing the assessment and mitigation of its potential health and environmental implications

Nanotechnology opportunities and potential hazards will have major impacts on most industrial sectors. Many researchers believe that it is important to understand the possible health and environmental hazards, as well as the consequences of inadequate management and monitoring. Similar to energy, new systems of dialogue among scholars from around the world will be essential to provide better understanding and rapid adaptation in addressing two key issues:

(1) Potential negative impacts; and

(2) Global monitoring and forecasting of regional nanomarkets, to provide decision-support information for the private sector and policy-makers.

The session set up an international advisory board for addressing these issues, which include experts from Russia (Nadezhda Gaponenko, coordinator), the US (Ted Gordon, honorable member; Mike Treder, Director, Responsible Nanotechnology Center), Canada (Elizabeth Florescu, research director, Millennium Project) Germany (Karlheinz Steinmueller, Scientific Director, Z_Punkt), Korea (Youngsook Park, Chair, Korean Node of the Millennium Project), China (Dr. Zhouying Jin, Director of the Institute of Quantitative Economics & Techno-Economics, Chinese Academy of Social Sciences) and Belgium (Philippe Destatte, Director of The Destree Institute). The board suggested addressing to UNESCO for help to implement the recommendations. The Millennium Project proposed that the “Dialogue of Civilizations” holds a high-level seminar for further discussion of these issues. It would be desirable to invite UNESCO, the World Federation of United Nations Associations, and Michael Roco of the National Science Foundation, in addition to policy makers, scholars, and private sector actors from major regions of the world.

Additional Information

The Millennium Project is a global participatory futures research think-tank organized as an independent, interdisciplinary, transinstitutional, and multicultural information system, providing an international capacity for early warning and analysis of global long-range issues, opportunities, and strategies. It is a “strategic global intelligence” that interconnects global and local perspectives through its network of 30 Nodes and over 2,500 participants from around the world. The project provides future studies, expertise and analytical input to UN organizations such as UNDP, UNESCO, UNEP, UNIDO, FAO, and informal advise to the Office of the Secretary-General of the UN, facilitates future-oriented and foresight units in many countries of the world; helps governmental agencies to organize and provide future-oriented studies and foresight programs; and provides strategic studies for corporations.

We appreciate your ideas, suggestions, contribution, which could help advance and implement the Action plan developed in Rhodes. Please, send your suggestions to Dr. Paul Werbos (pwerbos@nsf.gov) or Dr. Nadezhda Gaponenko (foresightr@mail.ru)