

MEMORANDUM OF COOPERATION BETWEEN THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA AND THE MINISTRY OF MINES AND ENERGY OF THE FEDERATIVE REPUBLIC OF BRAZIL FOR COOPERATION IN HYDROGEN ENERGY TECHNOLOGY

The Department of Energy of the United States of America and the Ministry of Mines and Energy of the Federative Republic of Brazil (hereinafter referred to as the Participants),

Recognizing the joint statement issued by President George W. Bush and President Luiz Inácio Lula da Silva, in June, 2003, affirming the mutual interest of the United States and Brazil in energy security, economic prosperity, and environmental protection;

Recognizing that the Participants signed a Memorandum of Understanding in June 2003, establishing a mechanism for consultations on energy cooperation, and for exchanging ideas and information on energy issues and technologies that are of mutual interest, particularly hydrogen energy; and

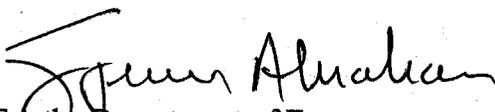
Noting that the United States and Brazil are two of the founding partners of the International Partnership for the Hydrogen Economy (IPHE) which is a multilateral forum organized to advance hydrogen research, development and deployment activities with the purpose of accelerating the transition to a global hydrogen energy economy

Have reached the following understanding:

The Participants, together with the United States Agency for International Development and a Brazilian financial agency to be nominated, intend to create a joint team to undertake a collaborative effort to advance hydrogen sector research, development and deployment activities, both bilaterally and multilaterally. This team will consult regularly to identify common areas of interaction on specific points of their respective roadmaps that cover future hydrogen production, storage, transport, distribution, end-use technology, safety codes and standards.

The Participants may call upon, as they deem appropriate, other government agencies, academic institutions and the private sector for the development of agreed cooperation efforts in the areas mentioned above.

Signed in the English and Portuguese languages, in Brasilia, on April 19th, 2004.


For the Department of Energy
of the United States of America


For the Ministry of Mines and Energy
of the Federative Republic of Brazil