



Country Update Brazil

➤ New Policy Initiatives

- The Ministry of Mines and Energy (MME) and the Ministry of Science, Technology, Innovation and Communications (MCTIC) are discussing the possibility of transferring the official representation of Brazil in IPHE from MME to MCTIC. The subject came up during the visit of the Executive Director of IPHE, Mr. Tim Karlsson, to MME, in September, 2017. There is a common understanding that the transversal character of the theme and the stage of development of FCH technologies in Brazil lead the main Brazilian stakeholders in the subject currently to have great interaction with MCTIC, especially universities and research institutes. So, making MCTIC the official representative of Brazil in IPHE would significantly facilitate the involvement of Brazilian agents with the IPHE.



Country Update Brazil

➤ R&D Update

- The B3 Shipyard, located in Salvador, Bahia, started the construction of a catamaran with capacity for 100 passengers which will be powered by hydrogen and will have electric propulsion. This activity is part of a project from the Hydrogen Laboratory (LabH2) of the Post-graduation and Engineering Research Institute Alberto Luiz Coimbra (COPPE), at the Federal University of Rio de Janeiro (UFRJ) and is financed by Furnas Energy Company, under the R&D Program regulated by the National Regulatory Agency for Electric Energy (Aneel);
- LabH2/Coope/UFRJ and Itaipu Technological Park (FPTI) established a partnership for the study and demonstration of the Coppe/UFRJ's hybrid electric-hydrogen bus in FPTI and the Iguaçu National Park. The activities are scheduled for early 2018, and will use the existing infrastructure in FPTI to produce hydrogen by water electrolysis. The partnership was one of the results of the visit of the IPHE Executive Director, Mr. Tim Karlsson, to Brazil.



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➤ R&D Update

- The Ministry of Science, Technology, Innovation and Communications (MCTIC) has established a bilateral cooperation with Germany for the development of advanced fuels. The objective of the project is to create an international reference model for the production of alternative fuels from renewable energies with no environmental impacts, for aviation and sectors with no potential for electromobility. The main element of the cooperation is a pilot project, in which these fuels will be generated and applied as evidence of viability. FCH technologies will play a relevant role in the project. The implementing partners will be MCTIC and the German Aerospace Center (DLR).



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➤ Demonstration and Deployments Update

- A demonstration of Coppe/UFRJ's hybrid electric bus was held in November 2017 in the city of Volta Redonda, State of Rio de Janeiro, RJ, to test local urban use.



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➤ Events

- On April 5th, an event occurring in Rio de Janeiro/RJ marked the foundation of the Brazilian Hydrogen Association (ABH2). The new entity aims to bring together research institutions, companies and specialists interested in the research, technological development and innovation of themes related to the hydrogen industry. ABH2 will be part of the International Association for Hydrogen Energy (IAHE) and will support the organization of the 22nd World Hydrogen Energy Conference – WHEC 2018, which will be held in Rio de Janeiro/Brazil.





Country Update Brazil

➤ Events

- Visit of IPHE Executive Director, Mr. Tim Karlsson, to Brazil:
- September 18th: Workshop “The Dawning of the Hydrogen Energy in the World Economy”, at the Technological Park of the Federal University of Rio de Janeiro. He made a presentation and participated in a round table together with Mr. Mauricio Tolmasquim, former CEO of Empresa de Pesquisa Energética (EPE) – Brazil’s energy research and planning authority;
- September 20th: Seminar “International Cooperation on Hydrogen Energy”, organized by the Ministry of Science, Technology, Innovation and Communications (MCTIC) at the National Council for Scientific and Technological Development (CNPq), in Brasilia, Federal District. He presented the current state of FCH technologies and policies worldwide for an audience of embassies, government institutions and FCH companies. There were also presentations from national and international companies about their actions related to FCH technologies, and Prof. Paulo Emílio Miranda publicized the realization of WHEC 2018 in Brazil;



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➤ Events (cont.)

- September 20th and 21st: In Brasilia, Mr. Karlsson also had meetings with authorities at:
 - Ministry of Science, Technology, Innovation and Communications (MCTIC);
 - National Regulatory Agency for Electrical Energy (Aneel);
 - Ministry of Industry, Foreign Trade and Services (MDIC); and
 - Ministry of Mines and Energy (MME).

- September 22nd: Mr. Karlsson participated in a workshop at the Technological Park of Itaipu, in Foz do Iguaçu, State of Paraná, where he also made a presentation and contributed in a discussion with representatives of Itaipu and some researchers

(Ricardo Ferracin and Marcelo Miguel, from Itaipu; Prof. Dr. Helton Alves, from Federal University of Paraná (UFPR) and Prof. Dr. Paulo Emílio Miranda, from Federal University of Rio de Janeiro. After the event, Mr. Karlsson also visited Itaipu Hydropower Plant facilities.





Country Update Brazil

➤ Regulations, Codes & Standards

- Brazilian Association of Technical Standards (ABNT) has established the Technical Committee CEE-67 on hydrogen technologies and fuel cells. This committee is a mirror of ISO Technical Committee TC-197 “Hydrogen Technologies” and also deals with the scope of IEC Technical Committee TC-105 “Fuel Cells”. Some of most prominent Brazilian institutions, researchers and professionals from HFC related matters are members of it.



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22nd World Hydrogen Energy Conference
WHEC 2018
Rio, June 17 – 22, 2018
(<http://www.whec2018.com>)

Deadline for abstracts submission has been shifted to December 11th, 2017.

Authors are invited to contribute an abstract under the motto
“Power and biomass to hydrogen”

See Call for Abstracts brochure at
https://www.whec2018.com/Media/2/WHEC%202018_Brochure_Call%20for%20abstracts_online.pdf.

