



International Partnership  
for Hydrogen and Fuel Cells  
in the Economy

# Country Update: South Africa

**30th IPHE Steering Committee Meeting**  
**Pretoria, South Africa**  
**6 December 2018**



## Policy Initiatives:

- Draft White Paper on Science, Technology and Innovation released in October 2018
- Green Transport Strategy approved by Cabinet

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Fuel Cell Funding for 2018/19 financial year (1 April 2018 to 31 March 2019) is as follows:

- Government: R108 million (USD 8.00 million);
- R43 million for technology demonstration and deployment;
- R19 million additional funding from Private Sector.



## Fuel Cell powered Scooter Project



- The integration of a fuel cell unit in a battery electric scooter as a range extender has been completed.
- A canister based refueling system incorporating the new metal hydride recipe has been developed and is being deployed to support the electric scooter.

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## Rural Electrification Project

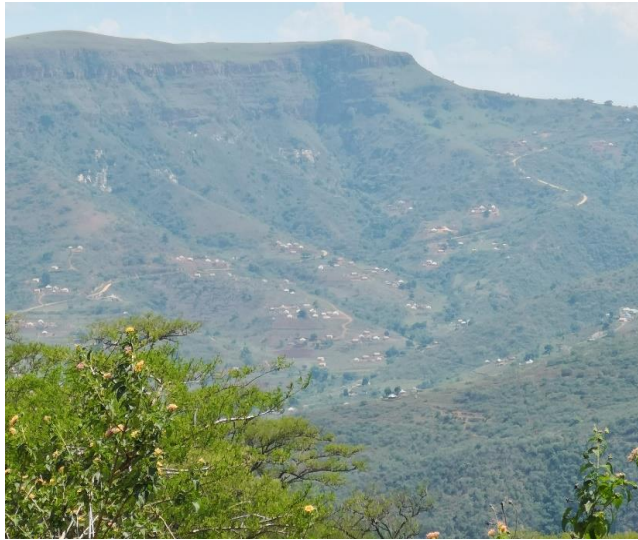
- DST and Department of Energy (DoE) are collaborating in fuel cell field trials for rural electrification
- The goal is to supply electricity to 5 communities, i.e. ~540 households, including rural clinics and schools and high mast lighting, for 36 months (or longer, subject to agreements and Eskom electrification plans for the area/s)
- Partners are currently reviewing 5 proposed sites in KwaZulu Natal Province
- CHEM's fuel cell DC Charging stations will be deployed in each community
- HyPlat to supply MEAs for the fuel cells upon qualification of the MEAs by CHEM
- Bambili Group (local BEE partner) will coordinate the project
- DST will fund the Fuel Cell component while DoE will fund the reticulation and high mast lights through their Energy Efficiency and Demand Side Management Programme.



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## Off grid Rural Electrification Project



Some of the proposed sites for deployment

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## House Hold Starter Kit



- Compact, high power density
- Smart ID, theft deterrent
- Single battery can power system for a day

- Bright LED lighting
- Phone charging
- Radio / MP3 player

- 19" color TV
- 12VDC, high efficiency
- Potential need for theft deterrent, Smart ID

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## Views and Engagement on International Initiatives:

- **Hydrogen Council:** The efforts of the HC are supported. Anglo American Platinum (AAP) is a member of the HC. AAP will make a presentation on behalf of the HC.



**Hydrogen Energy Ministerial:** South Africa, represented by the Deputy Director-General for Technology Innovation, Mr Mmboneni Muofhe, participated in the Hydrogen Energy Ministerial Meeting held in Tokyo in October 2018.

- **Mission Innovation:** Extent of South Africa's involvement in MI still to be established. Domestically, South Africa supports increased expenditure on research, development and Innovation (RDI). The country seeks to increase RDI partnerships on the continent as well.