

Description of integrated pilots/demonstrations/field tests/existing practices

1. Name of the case : Regional deployment and monitoring the 1kW class residential fuel cell system

2. What is integrated with DSM

DG

Energy storage

Smart grid technologies

3. What is the level of commercialization

Research project

Demonstration

Field test

Existing practice

4. Where to find more information?

- Contact person : Dr. Dalyoung Park
- Company : Korea Gas Corporation
- web-site : www.cleanfc.co.kr
- references

5. Objectives of the case

Monitoring and assessment of real-time operation in static fuel cell systems for residential use

Enhancing the reliability and robustness for system operation and contributing initial market creations

6. Business rationale/model

Construct the market infrastructure up to 2008 for disseminating residential fuel cell systems

Description of integrated pilots/demonstrations/field tests/existing practices

Create the Initial market and resolve the market barriers for the new adoption of fuel cell system due to relatively high cost of installation

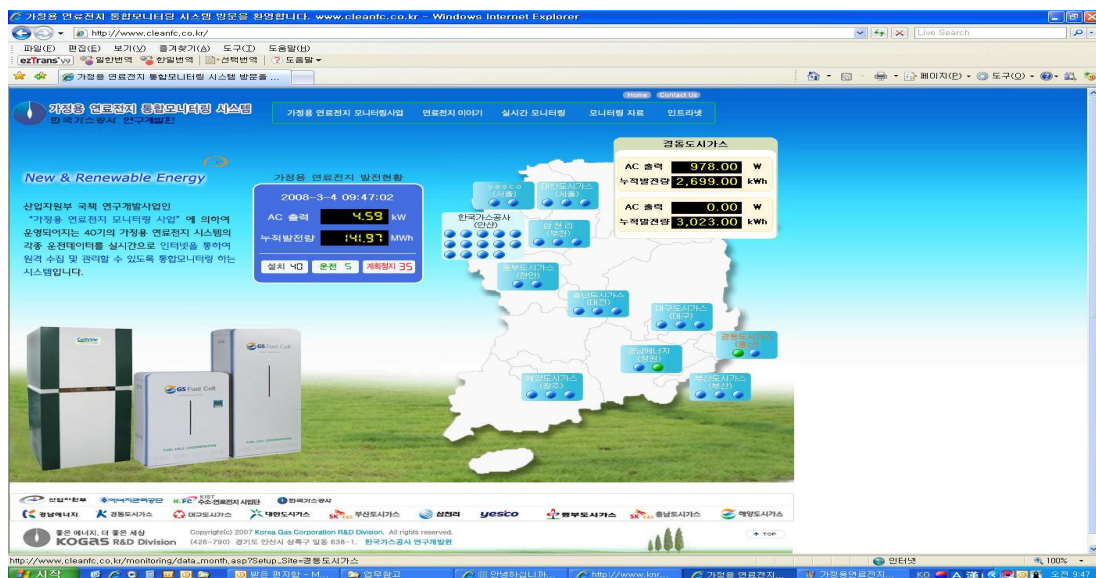
7. Technologies used

Static fuel cell system of 1kW scale and automatic system operations and maintenances

8. Short description of the case

210 units of fuel cell systems are to be deployed nationwide in residential building L up to 2011,

Regional city gas suppliers (more than 10) are participating in consortium with the local governments.



9. Achieved/expected results (operational savings, CO₂, efficiency enhancement)

As of March 2008, 40 units of fuel cell have been installed and operated (Generation efficiency reached more than 30%)

10. Lessons learnt

Find out the diffusion constraints for adopting residential fuel cell and the necessary procedure for proper O&M