

## **News Article for RISUD Strategic Focus Area (SFA) Scheme**

	<b>Name</b>	<b>Department</b>
1. <b>Principal Investigator:</b>	<u>Prof. Shengwei Wang</u>	<u>BSE</u>
2. <b>Name of SFA:</b>	<u>Development of Smart and Grid-Responsive Buildings</u>	
3. <b>Project Title:</b>	<u>Optimized Design and Optimal Control of Smart Buildings of Enhanced Grid Friendliness and Responsiveness</u>	

#### 4. **Second Year Progress/Achievement**

- The feasibilities and capabilities of buildings for grid operating reserves of different time scales and demand response are being investigated;
- Demand response and demand limiting strategies have been developed;
- Design of buildings and energy systems of enhanced grid-friendliness and responsive capacity are being developed;
- Development of frequency-response control methods;
- Set-up of a test platform for frequency-response control performance tests.

A test platform for frequency-response control performance tests of building HVAC systems has been built. This facility will be used to test the capacity and the dynamics of HVAC components (particularly variable speed pumps) used to responding to the frequency response signals of smart grid. The facility will be used also to develop and test new frequency-response strategies.