

Cross-Cutting Strategic Research Areas

Goal 6: Basic Research		Goal 1: Energy End Use				Goal 2: Energy Supply					Goal 3: Capture & Sequestration			Goal 4	Goal 5
Fundamental Research Area	Strategic Research Area	Transportation	Buildings	Industry	Grid	Fossil	Hydrogen	Renewable	Nuclear	Fusion	Capture	Geo-Storage	Terrestrial Sequestration	Non-CO ₂ Gases	Measurement and Monitoring
Physical Sciences	Materials: High Temperature														
	Materials: Tailored Mechanical Chemical Properties														
	Materials: Tailored Electrical Magnetic Properties														
	Heat Transfer & Fluid Dynamics														
	Combustion														
	Chemistry (Electro, Thermo)														
	Chemistry (Photo, Radiation)														
	Membranes & Separations														
	Condensed Matter Physics														
	Nanosciences														
	Geosciences & Hydrology														
	Chemical Catalysis														
	Biological Sciences	Bio-Catalysis													
Plant and Microbial Genomics (Biotechnology)															
Bio-Based & Bio Inspired Processing															
Environmental Sciences	Environmental Science														
	Atmospheric Science														
Advanced Scientific Computing	Computational Sciences (Models & Simulations)														
Fusion Sciences	Plasma Sciences														
Enabling Research	Strategic Research for Sensors & Instrumentation														

- A strategic research area that is **central to advancing** the technology approach.
- A strategic research area that is **expected to contribute significantly** to the technology approach.
- A strategic research area that has the **potential to contribute significantly** to the technology approach.
- A strategic research area that is **not expected to contribute significantly** to the technology approach.

Table 9-1.
Cross-Cutting
Strategic
Research Areas