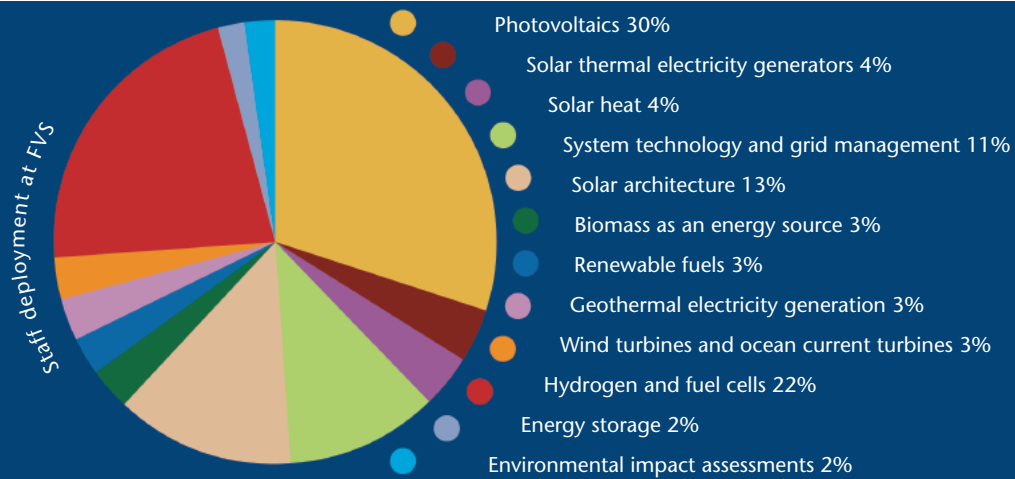


# Research and development fields



Energy supply is the provision of useful energy as electricity, heat, and solid or liquid fuels. The various types of solar energy, geothermal heat, and ocean energy are available as primary energy sources for a sustainable energy supply.

**Solar energy** can be converted into useful secondary energy with technologies used today.

- Photovoltaics
- Solar heat
- Solar thermal electricity generation
- Wind turbines
- Hydropower
- Biomass
- Solar chemical processes

**Geothermal heat** is converted into

- Electricity
- Heat

**Ocean energy** is converted into electricity by means of

- tidal power plants
- ocean current turbines
- wave energy

These energy technologies complement each other in terms of quality and time distribution in a mixture of thermal and electric energy sources: in the midterm, in an optimized combination with conventional energy technologies; in the long term, largely on their own.

The issues covered by FVS include all solar and renewable energy, including a large variety of individual scientific issues.

*Overview of the research issues at FVS and the staff capacities currently devoted to them.*