SUBJECT CLASSIFICATIONS FOR ENERGY

1 Heat Transfer and Heat Pumps
1.010 Heating/cooling Systems
1.020 Heat Pumps
1.030 Heat Convection
1.040 Thermal Energy Storage
1.060 Absorption and Adsorption Machines
1.070 Energy Conservation

2 Energy Conversion and Efficiency
2.010 Gas Cycles
2.020 Steam Cycles
2.030 Energy Recovery
2.040 Diesel Engines
2.050 Combined Cycles
2.060 Supercritical Steam Cycles
2.070 Combustion
2.080 Emission Control
2.090 Energy Management

3 District Heating and Cooling and CAES
3.010 District Heating
3.020 District Cooling
3.030 Compressed Air Energy Storage
3.050 Heat Demands
3.060 Cooling Demands
4 Energy in Buildings
4.010 Energy Efficiency
4.020 Industrial Processes
4.030 Low-energy Buildings
4.040 Energy Savings in Buildings
4.050 Central Heating systems
4.060 Heat Losses in Buildings

5 Solar Thermal
5.020 Solar Modeling
5.030 Solar Radiation
5.040 Solar boilers
5.050 Solar Absorption
5.060 Solar Air Heating
5.070 Solar Collectors and Concentrators
5.080 Solar Ponds

6 Geothermal and Organic Rankine Cycle
6.010 Ground Thermal Applications
6.020 Resource Potentials
6.030 Organic Rankine Cycle

7 Thermodynamics
7.010 Thermodynamic Analysis
7.020 Exergy Analysis
7.030 Entropy Analysis
7.040 Second Law Analysis
7.050 Energy Analysis
7.060 Irreversible Thermodynamics
7.070 Nonequilibrium Thermodynamics

**8 Fossil Fuels**
8.010 Coal and Lignite
8.020 Natural Gas
8.030 Oil and Oil Shale
8.040 Demand
8.050 Industry and Refineries
8.060 Mining
8.070 Supply
8.080 Pricing and Policy
8.090 OPEC
8.100 Coal Gasification

**9 Biofuels and Biomass in Engines and Turbines**
9.010 Palm Oil
9.020 Biodiesel
9.030 Biogas
9.050 Biofuel
9.060 Biomass
9.080 Charcoal
9.110 Biofuels in combustion engines
9.120 Biomass in gas and steam turbine cycles
10 Biomass and waste gasification and conversion to biofuels

10.010 Gasification
10.020 Combustion/Incineration
10.030 Pyrolysis
10.040 Waste

11 Energy inputs in crop/biofuel production

11.010 Life Cycle Assessment
11.020 Industry Input/output
11.030 Energy use in crops production

12 Hydrogen, Fuel Cells, Energy Carriers and Storage

12.010 Hydrogen
12.020 Fuel Cells
12.030 Electrolysers
12.040 Battery
12.050 Pumped Hydro
12.060 Flywheel
12.070 Superconducting Magnetic
12.080 Supercapacitors

13 Electricity Demand, Smart Grid and Smart Energy Systems

13.010 Electricity Markets
13.020 Flexible Demands
13.030 Load-dispatch
13.040 Price Elasticity Surveys
13.050 Demand Forecasting
13.060 Electricity Savings

14 Wind Power
14.010 Fluctuations in Wind Speed and Production
14.020 Wind Energy Potentials
14.030 Wind Turbine Designs
14.040 Wind Farms
14.050 Planning and Project Development

15 Renewable Energy
15.010 Photovoltaic
15.020 Wave Power
15.030 Tidal Power
15.040 Thermal Solar Power
15.050 Ocean Thermal Energy Conversion
15.060 Hydro Power

16 Energy and Transportation
16.010 Transportation and Energy
16.020 Scenarios and Forecasting
16.030 Emerging Technologies
16.040 Electric Vehicles
16.050 Automobiles and Gasoline

17 Integrated Heating, Cooling and Electricity Systems
17.010 Distributed Energy Systems
17.020 Hybrid Systems
17.030 Small-scale RES Systems
17.040 Storage/FC/RES designs
17.050 Combined Heat and Power CHP
17.060 Trigeneration/Multigeneration
17.070 CCHP (Combined Cooling and heating Systems)

18 National Energy Systems
18.010 Renewable Energy Systems
18.020 Energy Scenarios
18.030 Large-scale Wind Integration
18.040 Energy System Models
18.050 Electricity Distribution
18.060 Power Supply
18.070 Urban Energy Use

19 Energy and Environment
19.010 Environmental Management
19.040 Energy Use in Goods Production
19.060 CO2-emissions
19.070 Environmental Impact Assessment
19.080 Emission Control

20 Energy Planning Tools
20.010 Geographical Information System
20.020 Energy System Analysis Models
20.030 Degree Days Tools
20.040 Energy Project Design Models
20.050 Mathematical Modeling
20.060 Demand Forecast Models
20.070 Multicriteria Decision Tools
20.080 Optimisation Models
20.090 Integrated Resource Planning
20.100 Demand Side Management

21 Energy Policy
21.010 Energy Policy Design
21.020 Public Regulation
21.030 Taxation Policy
21.040 Security of Energy Supply
21.050 Pricing of Energy
21.060 Energy and Jobs
21.070 Energy Efficiency Policies
21.080 Policy and Structural Policies
21.090 Energy Access
21.100 Energy and Climate Change

22 Energy and Economy
22.010 Environmental Economy
22.020 Resource Economy
22.030 Institutional Economy
22.040 Political Economy
22.050 Finance and Investments
22.060 Feasibility Studies
22.070 Cost-Benefit Analysis
22.080 Cost-Effectiveness Analysis
22.090 Energy and Economic Growth

23 Carbon Capture
23.010 Carbon Capture Storage
23.020 CO2 Capturing

24 Nuclear
24.010 Uranium
24.020 Nuclear Safety
24.030 Nuclear Power