NUCLEAR

Nuclear fission boils water creating steam that turns turbines, generating electricity.

FLEXIBLE & RELIABLE	RELIABLE, NOT FLEXIBLE
RENEWABLE	NON-RENEWABLE
GREENHOUSE GAS EMISSIONS	VERY LOW
LAND USE	LOW

WASTE PROFILE
HIGH (very special handling for different levels of radioactive waste)

TYPICAL COST PER KILOWATT: 10.1 cents/KW

HYDRO

Flowing water turns turbines, generating electricity.

FLEXIBLE & RELIABLE	BOTH	(SOMEWHAT QUICKLY ADJUSTABLE)
RENEWABLE	RENEWABLE	
GREENHOUSE GAS EMISSIONS	VERY LOW	
LAND USE	LOW-MEDIUM	

WASTE PROFILE
LOW (100 year+ asset life)

TYPICAL COST PER KILOWATT: 6.1 cents/KW

NATURAL GAS

Burning natural gas boils water creating steam that turns turbines, generating electricity.

FLEXIBLE & RELIABLE	BOTH	(QUICKLY ADJUSTABLE)
RENEWABLE	NON-RENEWABLE	
GREENHOUSE GAS EMISSIONS	HIGH	
LAND USE	LOW	

WASTE PROFILE
LOW (Not including emissions)

TYPICAL COST PER KILOWATT: 11.3 cents/KW

WIND

Wind turns turbines, generating electricity.

FLEXIBLE & RELIABLE	NO	(WEATHER DEPENDENT)
RENEWABLE	RENEWABLE	
GREENHOUSE GAS EMISSIONS	VERY LOW	
LAND USE	MEDIUM-HIGH (Variable)	

WASTE PROFILE
MEDIUM (Repaired often, composite materials go to landfill)

TYPICAL COST PER KILOWATT: 15.4 cents/KW

SOLAR

Sunlight reacts with materials in photovoltaic (PV) solar cells, generating electricity.

FLEXIBLE & RELIABLE	NO	(WEATHER DEPENDENT)
RENENWABLE	RENEWABLE	
GREENHOUSE GAS EMISSIONS	LOW (~2x HYDRO)	
LAND USE	MEDIUM-HIGH	

WASTE PROFILE
MEDIUM (Replaced often, small amount of toxins requires special handling)

TYPICAL COST PER KILOWATT: 50.2 cents/KW

BIOMASS

Burning waste wood pellets boils water creating steam that turns turbines, generating electricity.

FLEXIBLE & RELIABLE	BOTH	(QUICKLY ADJUSTABLE)
RENENWABLE	RENEWABLE	
GREENHOUSE GAS EMISSIONS	LOW (NET=0)	
LAND USE	LOW-MEDIUM	

WASTE PROFILE
N/A (Maybe low)

TYPICAL COST PER KILOWATT: 25.8 cents/KW