- Clean Vs Brown
  - Current Energy Ratio
    - 66% coal
    - 21% nuclear
    - 8% natural gas
    - 4% hydro
    - <1% renewable
  - Current Consumable Energy (Brown)
    - Benefits
      - As much draw as want
      - only pay for usage (cheap)
        - save money in short run
    - Problems
      - Inefficient: 60% is wasted
        - heat at power plant
        - "leaky" grid
      - Fuel sources are running ou
      - Prices are increasing
        - mining extraction costs increasing
        - coal transportation costs increasing
        - Clean up your own messes cost increasin
        - Cleaner furnaces cost more
      - Damaging the Air/Water
        - Fly ash in the water
        - Coal pollution into the air
        - Nuclear waste (danger)
          - Fukishima
            - Damage from Earthquake, Typhoon
            - No electricity, no pumps
            - 3 reactors melted down
            - Currently trying to cover them, using remote controlled equipmen
            - 10 years can begin removing fuel
            - 30 years of clean up
            - 3 feet of concreete to prevent beach erosion (50 years)
            - soil contamination
          - TVA still building
            - Working on new nuclear plant currently (Watts Bar 2) seen from Black Mountair
            - Have plans to "rebuild" a previous attempt (zombie) bellefonte
          - The sun (93 million miles away
  - Clean Renewable Energy
    - Problems
      - Pay for it all up front
        - new financing
        - renting options
      - expensive
        - $10k small system
        - same as a used car
    - Benefits
      - Free fuel Forever
      - No continuing Costs
      - Hedge against rising prices (already paid for
      - NOT damaging the environment
        - leaving the earth BETTER than we found it!
        - NOT fouling our nest