Team 1: Energy Karma

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Problem:

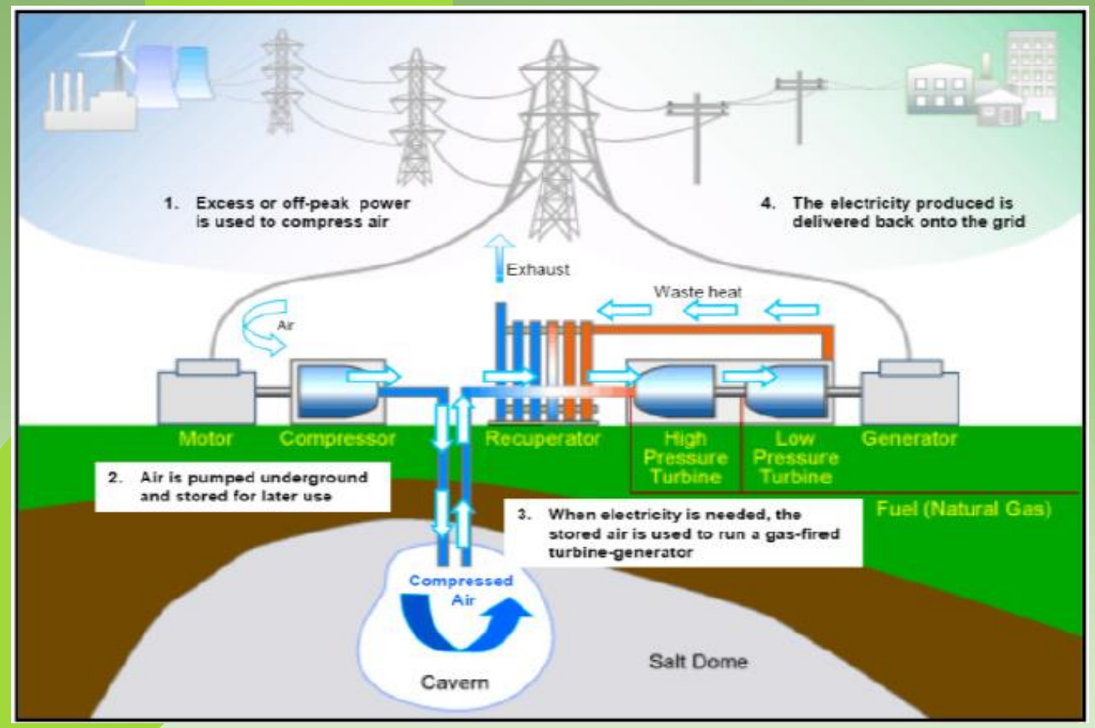
Suburban sprawl changes diverse landscapes into monolithic, homogenous housing developments. Sprawl limits ecosystem services and energy generation potential by developing the land for a single use: housing.

To address pressing societal and economic concerns about effective land use, we're creating a new housing development which designs out land waste and combines otherwise wasted renewable energy potential with otherwise wasted ecosystem services.

Solution:

Our design combines a low-impact housing development with onsite energy generation and storage. The site is currently farmland, located in rapidly-developing Hudsonville, MI. Combining the housing development with a site-contained energy generation and storage system for the houses allows for varied and effective uses of the land, combatting one of the primary problems of urban sprawl: homogenous land use.

Compressed Air Energy Storage (CAES) acts like a battery to store energy that would otherwise be lost



https://energyeducation.ca/encyclopedia/Compressed_air_energy_storage