

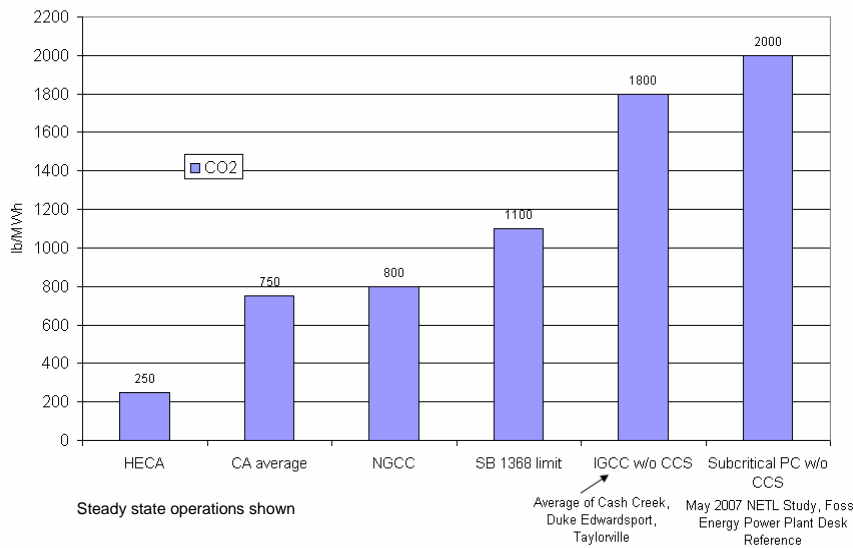
HECA will be located in the Bakersfield area, close to the Elk Hills production field (CO₂ EOR and sequestration site)



- 250 MW net power production
- Utilizes local area petcoke supply for primary feedstock (petcoke/bituminous coal/potentially biomass capable)
- Production field characterized for CO₂ EOR and permanent sequestration
- CO₂ storage permitted by DOGGR/CEC
- Application for Certification (AFC) filed with CEC July 31, 2008



HECA achieves very low CO₂ emissions



HECA provides 250 MW of low-carbon, hydrogen energy baseload power for California

Increases California energy security through CO₂ EOR (reducing foreign oil imports) and use of abundant local energy sources (petroleum coke, potentially biomass)

Prevents generation of CO₂ and criteria pollutants in Asia from California energy byproduct source

Saves fuel and pollution from shipping petcoke to Asia and crude oil to California

Creates low carbon energy center in San Joaquin Valley with substantial growth opportunities

Provides fuel diversity and reduced exposure to high natural gas prices

Boosts local economy by creating up to 1500 construction jobs and 100 permanent operational positions in Bakersfield area

Generates new tax revenues for local communities and the state



HECA provides a timely opportunity for California clean energy leadership

Several years ahead of other projects that have not performed CO₂ site characterization and AFC preparation and submittal

Project participation by industry-leading CO₂ EOR and subsurface experts BP (through HEI) and Oxy


Essential technical and large complex project integration expertise required to deliver this first-of-a-kind project


Helps create the technical, cost, regulatory, financial, and commercial framework to accelerate wide-scale deployment of CCS

Lays foundation for wide-scale and critically needed international CCS deployment




Capturing and Sequestering CO₂






- Over 1 billion tons of CO₂ storage capacity available in local Californian oilfields (over 200 years)
- Initial studies are complete designating the most attractive depleted oil fields for CO₂ sequestration
- Studies include:
 - pipeline routing studies to transport CO₂
 - site characterization for effective sequestration and enhanced oil recovery
 - evaluating appropriate long term monitoring techniques
- Initial study suggests several reservoirs in the San Joaquin Valley meet all of the screening criteria.
- CO₂ to remain permanently stored
- Additional oil recovery generates new revenues for the state



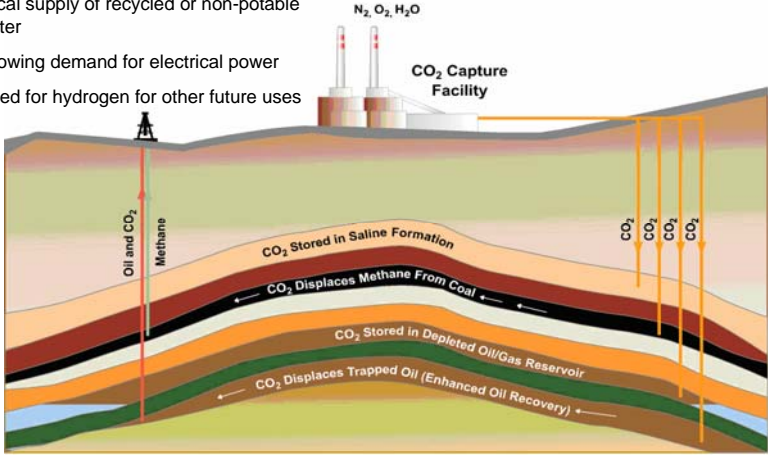
RioTinto


A joint venture between
BP Alternative Energy and Rio Tinto

Why Kern County, California?



- Near existing depleted oil reservoirs and infrastructure to store carbon dioxide
- Local supply of recycled or non-potable water
- Growing demand for electrical power
- Need for hydrogen for other future uses





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Why will HECA be commercially successful?

Necessary components for a commercially viable project	HECA
Demand for base load low-carbon power	✓
Demand for CO ₂ (dry, high volume, high purity, but less than food grade)	✓
Minimization of technical risks by using existing technology	✓
Well characterized EOR & storage site (EOR plus)	✓
Readily available feed stocks (petcoke, water, etc)	✓
State leadership pushing for "Green Energy" deployment	✓
Strong commercial partners	✓
Costs competitive with renewables, yet provide base load power	✓
Paves the way for a low-carbon energy center and future projects	✓



Hydrogen Energy California

Key Participants



BP Alternative Energy -- global leader in clean fuels projects, including gasification projects and CO₂ sequestration



Rio Tinto -- internationally recognized global resources company



GE Energy -- leading provider of IGCC technology and equipment and supporting services



Fluor -- among world's largest publicly held engineering and construction contractors, and leader in the design of CCS and power facilities



URS -- renowned leader in the permitting of power plants; respected technical expertise and work relationships with CEC, EPA, and SCAQMD



Occidental Petroleum -- world leader in oil and gas production and CO₂ EOR



