



Effects on California's Economy

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Effects on the California Economy





To evaluate the effects of projects on California's economy, Ideal data over several years after project completion includes

- Products: sales, prices, costs
- Jobs
- Knowledge spillover

Still imperfect solution: product growth may continue much longer

Agricultural research effects peak perhaps 24 years after research

What data we have: Follow-on funding to PIER Small Grants program

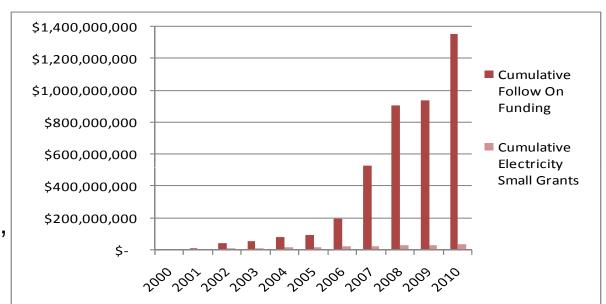
- Surveys every few years
- Staff research on a few companies that started with PIER grants
- → At least \$1.3 billion private, non-utility investment pursuant to PIER research

Effects on the California Economy





- → Market values result at \$1.3 billion so far
- Affected firms will grow, create jobs



PIER estimated how investment creates jobs

- Found data series on clean tech venture capital, clean tech jobs in California, 1999 to 2007
- Too few years for econometric analysis
- Compared investment to later growth, all time period and lag lengths, with and without correction for economy using non-clean-tech job growth

Jobs Creation





- For each \$100,000 of clean tech investment, one California job has been created
 - A job is "permanent" whereas investment is "one-time"
 - \$1.3 billion investment → over 10,000 jobs directly
 - Sensitivity analysis: most results ranged from 10,000 to 20,000 jobs
- Each job creates 1.8 additional indirect and induced jobs (firms and employees buy goods)
 - Used RIMS II multipliers applied to green jobs categories

TOTAL EFFECT: around 30,000 jobs

Next Steps





Implementing surveys and/or reporting requirements

- Jobs created in California
- Indirect jobs known of (installation)
- Jobs projected?
- Knowledge spillover ... what happened with staff, other product development, research
- Product's outcome in the market