

CLEANTECH TO MARKET (C2M)
FEEDBACK FROM RESEARCHERS ON PROGRAM BENEFITS

“I was thrilled to work with a team of students to explore the market opportunities for my research.”

Christine Ho, Co-Founder Imprint Energy, PhD Materials Science and Engineering, UC Berkeley

“They did a superb job in terms of technology positioning, market analysis, and business proposition. This created some interesting ideas that I will mull over. Bottom line: excellent work.”

Jan Rabaey, Donald O. Pederson Distinguished Professor of Electrical Engineering and Computer Sciences, UC Berkeley; Co-Director, Berkeley Wireless Research Center; Director, Multiscale Systems Center

“The students provided a deep dive not only into the technologies but also into a broad variety of business models, which is very useful for our scientists.”

Cheryl Fragiadakis, Department Head, Technology Transfer & Intellectual Property Management, Lawrence Berkeley National Laboratory

“We applaud your outstanding record of producing a steady stream of successes! The C2M program provides campus researchers with information and insights on the critical questions to address to move projects closer to commercial relevance, and in-depth market analyses that inform and catalyze industry investments. Several startup companies have emerged from C2M activities, so you are an economic driver of the region as well. C2M occupies a vital niche in the continuum from basic research to commercial products and services -- thank you for your sustained dedication and leadership.”

Carol Mimura, Assistant Vice Chancellor, IP & Industry Research Alliances (IPIRA), UC Berkeley

“I view C2M as a highly valued partner in the shared mission of commercializing university technology.”

Paul Wright, Professor of Mechanical Engineering, UC Berkeley; Director, Center for Information Technology Research in the Interest of Society (CITRIS)

“ They came up with appropriate business models we thought made sense. I was impressed with how quickly they came up to speed.”

Alex Zettl, Professor of Physics, UC Berkeley;
Faculty Senior Scientist, Lawrence Berkeley National Laboratory

“You and the team have really done a fantastic job here - wonderful slide deck.”

Jeff Urban, Facility Director, Inorganic Nanostructures, Molecular Foundry

“This experience was terrific. We asked the team for two pieces of information: ‘What markets best leverage the benefits of this system?’ and ‘Should we be pushing efficiency or cost in our optimization?’ The answers and detail provided in response were exactly what we needed from a scientific perspective.”

Rachel Segalman, Assoc. Professor of Chemical & Biomolecular Engineering, UC Berkeley

“Thanks for all your efforts on this project . . . we learned a lot from you!”

Chris Chang, Assoc. Professor of Chemistry, UC Berkeley (with Jeff Long)

“Overall, this experience was terrific. We asked the team for two pieces of information and advice: (1) *Market Analysis*: What markets best leverage the benefits of this system? And (2) *Technical Impact*: What is most important? Should we be pushing efficiency or cost in our optimization? The answers and detail provided in response were exactly what we needed from a scientific perspective. Thanks for all your help in making this possible!”

Rachel Segalman, Associate Professor of Chemical and Biomolecular Engineering, UC Berkeley

I. Verbatim comments from written surveys:

- “As a scientist, it is great to have this opportunity to obtain information on the **market needs and requirements** of the related technology.”
- “This study will definitively impact **the way we present some of our inventions.**”
- “I definitely gained **useful information that I might never have time to look for.**”
- “Involvement with C2M will help us in our **fundraising activities with DOE** who are showing a growing interest in ‘connection to market’.”
- “It will clearly impact our research and will be used to **present the technology to VCs** or to potential buyers. The outcome will also be used in the **selection criteria to pursue some of the technologies.**”
- “We are now looking at **niche markets to get our technology out there as a stepping stone to the extremely large market** which is our ultimate goal.”
- “It has been **extremely informative. We got lots of information** out of this study”
- “A better understanding of **how to bring laboratory discoveries into the marketplace.**”
- “Ideas for **alternative implementation strategies** that the students developed in their conversations with **potential partners.**”
- “Knowledge of **unexpected applications** of our technology.”
- “A much better **understanding of what the market could be** and **what customers look for** as key features.”
- “The **questions** they asked, the **contacts** they made, and the **background information** they gathered.”
- “I need to push the project harder, not only in lab work but also in **networking.**”

II. Summary of feedback from in-person focus group:

- Great **presentation materials** - scientists are using them to talk to investors and partners about the commercial potential of their research and to apply for more research funding.
- **Fresh perspective** - the students thought about things that had not occurred to the scientists. Even beyond market issues, their age leads them to see the world differently.
- It is helpful to have **cost and materials data from a market perspective** as compared to a bench prototype perspective.
- **Marketing, customer, and economic thinking** - scientists tend to focus on broader social value, whereas the students got more specific on economic, marketing and customer issues.
- Students apply **different "accent points"**; sometimes the information was not new, but it had a helpful different emphasis.