Building a commercial-scale advanced biofuel facility in California to satisfy California’s requirements for low-carbon fuels requires considerable development dollars and a tremendous amount of effort and time to bring the project to the financing and shovel-ready stages.

Obtaining the necessary permits in California contributes greatly to the investment of time, effort and money without any guarantee that approvals and permits will be issued. A number of environmental engineering firms, consultants, lawyers, etc. are required to navigate and successfully complete the permitting process.

In addition to obtaining these necessary entitlements, the development entity must also secure agreements for both feedstock supply and off-take sales with dependable and creditworthy parties. Obtaining these agreements requires significant time and development dollars, particularly in regards to the selection process of prospective partners and negotiating acceptable contracts.

Before financing can be secured a developer must also obtain a “Not To Exceed Price” to build the facility. A credible and bondable engineering-procurement-construction (EPC) firm is sought that must be willing to take on the commercial risk. This risk includes building the facility for the agreed upon not to exceed price, as well as guaranteeing the timely start-up and performance of the facility. The selection process mirrors the processes mentioned earlier. It requires time, effort and funds.

Using CE+P as an example, we have spent 7+ years and approximately $20 million developing our advanced biofuel project in the following ways:

- Obtain all the necessary entitlements to build the facility in Imperial County.
- Work with local and state leaders to build support needed to construct the facility.
- Find and secure a property that would meet our facility’s requirements.
- Plant, grow and harvest varieties of sugarcane and sweet sorghum that can supply the needs of a facility of our size.
- Obtain long-term off-take agreements with one of the world’s largest energy firms.
- Work with local growers on a mutually agreeable partnership to grow a special purpose crop.
- Work with engineering firms with experience designing and building similar commercially proven facilities in other countries.
- Working with US-based engineering firms to ensure technology is transferable to California.
- Interview and sign an engagement agreement with an investment banker who will raise the hundreds of million dollars needed to build a facility of this size.
- Interview and work with several large EPC firms willing to guarantee the price and performance of the facility in order to find and select the right one.
 ✓ Raise $20 million in development dollars to fund the essential tasks listed.
 ✓ Work with state agencies to obtain the sales tax waiver and income tax credit.
 ✓ Pay for operational expenses required to run a development company, including fundraising efforts, overhead, travel, team salaries, etc.

Once a development company achieves all of the above checklist and some of those listed below, which is no small task, the investment bankers can then go to the financial markets to secure necessary debt and equity to build the facility. In CE+P’s case, this will amount to $500+ million, with an anticipated 70% originating in the form debt and 30% in the form of equity.

With the development process in mind, CE+P requests that AB118 programs include funding support for biofuels project developers by making funds available for development period expenses. While individual grants of a few million dollars is significant at the post-development, project/construction phase, it is not impactful. It is important to note, however, that an award in that amount during the development period could be the determining factor for achieving financial closing and ultimate construction of a $500+ million advanced biofuel facility planned to operate in the state.

Let’s use CE+P again as the test example. While CE+P has raised and expended ~$20 million evolving the company, our investment banker was clear about the remaining tasks required for a successful financial closing and the subsequent construction. In our specific case it is estimated that we will need to raise an additional $5 million during the construction period for:
 ✓ Lenders and CE+P counsel
 ✓ EPC engineering to lock in the guarantees
 ✓ Carbon Intensity analysis and certification
 ✓ Third party opinion reports required for the financing
 ✓ Credit rating for the project
 ✓ Investment bankers expenses
 ✓ Independent engineer
 ✓ Electrical and gas interconnect studies and agreements
 ✓ Maintenance of CE+P’s current seed-sugarcane acres
 ✓ Continued option payments on the permitted property we intend to build upon
 ✓ Typical and customary overhead and expenses for the development team

CE+P contends that AB118 program funds granted to achieve tasks necessary for completion during the final stages of the development phase would be a prudent investment. The state would thereby participate in the future of a commercial-scale advanced biofuel facility in California and the positive economic impact it will bring to its region and the state.

Again, using CE+P as the example, we aren’t asking for the first dollars to get the project off the ground. We are requesting what could and should amount to the final development dollars needed to get the project financed and into the construction phase. The investment of a few million dollars from AB118 will also serve as a springboard for CE+P
to raise the remaining development capital, and even the $500+ million needed to build the facility.

CE+P also suggests that AB118 grant funds are better used to help move commercially-proven-technology projects to fruition. Spending limited and valuable AB118 funds on research and development for unproven “futuristic fuels” may not lead to the ultimate goal of AB118. The US DOE and the USDA have significantly larger pools of funds, and, therefore, should be the ones to support such R&D projects with longer timelines.

Finally, if the CE+P project becomes a reality with the assistance of AB118 program funding, the state will be investing in a facility with commercially-proven and financeable technology. The benefits include in-state production of very-low-carbon energy products, improved opportunities for local growers, the creation of well-paying permanent full-time jobs and economic stimulation to one of California’s most depressed areas.