

Questions for September 14 and 15 AB 118 Biofuels Workshop Panels**General Panel Questions**

1. For your company's portion of the California biofuels feedstock-production-distribution-sales supply chain, what are the critical market, technology or policy issues that must be surmounted in order to get state markets functioning properly in order to meet in-state production and end-use goals for sustainably-produced, low carbon intensity biofuels?
2. What types of projects should be funded in the 2010-2011 Investment Plan cycle (7/1/10 to 6/30/11) that would produce measureable results for the in-state production, distribution and sales of low carbon intensity biofuels within three years?
3. What is the appropriate level of state funding and or financial risk that the state should take relative to the private sector? Given the modest levels of AB 118 funding available, what other public or private sources could be available?
4. What are preferable funding mechanisms? How should project financing be structured?
5. Is it necessary for California to "bid away" projects from other states? What investment and/or actions are required?

Production Panel Questions

1. What are the reasons for the current stall in corn-based ethanol production and what are the prospects for restarting large-scale ethanol production in California?
2. What needs to occur in the market, technology or policy arenas for large scale cellulosic biorefineries to be built and operated in California? What are the prospects for phasing in cellulosic conversion technologies at existing dry mill biorefineries?
3. How quickly can alternate, lower carbon intensity feedstocks be phased in to replace Midwest corn feedstocks? What are the costs and issues?
4. Why are California biodiesel plants under-producing and what are the prospects for increasing biodiesel production in California?
5. What are the market, technology and policy issues associated with large scale renewable diesel production in California? How could AB 118 program investments best be used for this production technology?
6. How do project and capital costs for in-state biofuels production compare relative to other states?
7. What role could (or should) imported feedstocks play in meeting in-state production and end-use goals for low carbon intensity biofuels?
8. What potential solutions beyond AB 118 program investments are needed to increase in-state production?
9. How can we make California production competitive with imports such as Midwestern corn and out-of-state/country sugar cane-based ethanol?

Wholesale and Retail Panel Questions

1. Are there critical elements of the distribution infrastructure or wholesale markets that need to be addressed in order to see increased distribution of biofuels?
2. What needs to happen in the market, policy or technology arenas to substantially increase retail sales and use of E85 and biodiesel blends?
 - a. Where should the emphasis be placed and how much AB 118 funding should be allocated to do this?
3. What is the anticipated growth of public E-85 fueling infrastructure in California?
4. What are the costs of retail E85 pump installations and what should California invest to achieve “adequate” or “proactive” availability of retail outlets?
5. What is needed to make the “E85 pump business case” for individually owned stores?
 - a. What is needed for multiple retail outlet owners/operators?

Algae Panel Questions

1. What needs to happen in the market, technology or policy arenas before algae-based biofuels can be commercially produced in California?
2. Is more basic research needed before commercial production can begin?
3. What production technologies are best suited to California’s constraints and environmental concerns?
4. What are the environmental and sustainability issues associated with commercial-scale production in California? Is water use a limiting factor?
5. How can AB 118 investment monies be used to accelerate demonstration and commercial production facilities?

Feedstock Panel Questions

1. What are the market, technology or policy barriers to the development of California-based feedstocks that can serve as economic, sustainable alternatives to Midwest corn or soy feedstocks?
 - a. Consider “waste” and/or “nonwaste” starch/sugar, cellulose, crop, forest, agricultural residues and combinations thereof
2. What do feedstock producers need from biorefineries, in terms of market signals and contracts, to commit resources and/or acreage to feedstock operations?
3. What are likely near-term commercially viable, dedicated bioenergy feedstocks for California?
4. What bioenergy crops make business sense in California given water constraints and concerns about displacing food crops?
5. What types of pre-development work, including feasibility studies, field tests and feedstock analysis, are needed to accelerate biofuel feedstock production options?

6. What role should imported feedstocks such as sugarcane or oil palm play in meeting in-state production and use goals for sustainable, low carbon intensity biofuels?

Biomethane Panel Questions

1. Of the four main in-state biomethane sources – landfill gas, wastewater treatment plants, dairies, and farm organic waste – which resources have the greatest potential for use in the transportation sector? Which have the most hurdles to overcome?
2. What are the market, cost, infrastructure, and policy issues associated with developing biomethane as a transportation fuel or biorefinery fuel?
3. How can we encourage potential sources of biomethane to work with developers?
4. Should we think of pipeline gas business models that collect, clean and supply biogas to refineries as a complement or a competitor to biogas use in the transportation sector?

General AB 118 Program Feedback

The Energy Commission staff would like comments on the AB 118 program, including the Investment Plan, sustainability and solicitation parts of the program.