



Biomass Energy 2.0

CLEANER AIR & HEALTHIER COMMUNITIES

Converting ag biomass to energy and useful products using advanced, ultra-clean technologies can replace open burning and reduce smoke and harmful pollution—protecting rural families and farmworkers.

ECONOMIC & WORKFORCE DEVELOPMENT

Supporting biomass utilization generates new energy industries that can create skilled rural jobs, new revenue for farmers, and supply homegrown biofuels to alleviate pain at the pump.

ENERGY RELIABILITY

Agricultural biomass is a dependable, domestic energy resource that produces renewable power while diversifying the energy supply and strengthening resilience.

WHY BIOMASS?

California agriculture generates more than \$61 billion annually and produces significant volumes of agricultural biomass each year in the Sacramento region alone. Most of the millions of tons of remaining biomass residue is disposed of through open burning—an approach that creates no economic value and increases local pollution.

At the same time, energy demand is rising rapidly. Policymakers face a multi-faceted challenge: secure abundant, reliable and affordable energy supplies to allow for economic prosperity and growth while still strengthening local economies and protecting public health.

Agricultural biomass offers an opportunity. It is a scalable, domestic resource already available in significant quantities.

In the greater Sacramento region alone, over two million tons of biomass feedstock are available every year that can be converted to energy and biofuels to support rising energy demands and escalating fuel prices.

With supportive legislation and targeted investment, this underutilized feedstock can:

- Strengthen rural job growth
- Generate new farm revenue
- Expand domestic renewable energy production
- Improve long-term energy and fuel resilience
- Provide domestic sources of fuel to reduce high prices
- Reduce open burning and harmful emissions

BIOMASS ENERGY 2.0 IS A POLICY-READY SOLUTION FOR AMERICA'S ENERGY NEEDS

CAP-TO-CAP 2026



WHAT IS BIOMASS ENERGY 2.0?

Biomass Energy 2.0 refers to modern, ultra-clean, non-combustion technologies—such as gasification and pyrolysis—that convert agricultural material into valuable products. New mobile gasification technologies developed for on-farm biomass conversion promise even greater flexibility and cost-effective methods for using ag waste for beneficial products.

Instead of burning biomass residue, these technologies produce:

- Renewable energy
- Multiple transportation fuels
- Biochar soil amendments that improve crop yields
- Other high-value bioproducts for housing and construction materials

With the biomass availability just in the Sacramento region, upwards of 100 million gallons of liquid fuel or 300,000 tons of biochar could be generated every year to support new revenue streams.

Biomass in the Sacramento region converted to renewable biodiesel could potentially equate to \$500 million in revenue.

This approach reduces pollution while creating economic value that could be used as a national strategy for greater energy security and dominance and help reduce price pinches felt at home.

BENEFITS FOR RURAL COMMUNITIES

Reducing open agricultural burning delivers immediate economic and health benefits. In the Sacramento region where pollution can become trapped, cutting smoke and particulate emissions lowers exposure linked to asthma, lung disease, and heart impacts—especially for rural families.

At scale, Biomass Energy 2.0:

- Reduces harmful pollution
- Cuts risk of destructive wildfires
- Protects rural public health
- Creates skilled, local jobs
- Strengthens farm income
- Produces reliable, in-state energy

For rural communities, this is both an air quality strategy and an economic development strategy. Biomass utilization holds the key to creating well-trained, year-round jobs to bolster farming communities and increase local prosperity in the heartlands of America.

BIOMASS ENERGY 2.0 STRENGTHENS AMERICAN ENERGY SECURITY AND SUPPORTS FARMERS