

# FIGHTING CLIMATE CHANGE THROUGH BIOTECHNOLOGY INNOVATION

In order to meet climate change commitments, it is crucial to lead with science and U.S. innovation. The federal government can support pioneering technology breakthroughs that reduce greenhouse gas emissions in manufacturing, transportation, and agricultural supply chains to build a stronger, more resilient, and environmentally sustainable economy. BIO supports comprehensive climate change legislation and recommends the following executive actions that can be taken immediately to jumpstart efforts to address climate change:



### LEVERAGE THE REGULATORY SYSTEM TO QUICKLY DEPLOY CLIMATE-POSITIVE BIOTECHNOLOGIES

Biotechnology is already contributing to reductions in greenhouse gas emissions in agriculture, manufacturing, and transportation. Yet, it has the potential to yield significantly more environmental benefits if we leverage the regulatory system to quickly review and speed adoption of new technologies that can sustainably grow the economy and help reduce greenhouse gas emissions. We have seen the impact of this approach on innovative technologies like synthetic biology and gene editing, which have helped to mobilize COVID-19 cures and therapies. To realize the full climate-positive potential of biotechnologies and products, the Biden Administration should:

- Direct agencies to expedite regulatory pathways for biotechnologies and products that advance environmental, animal, and public health goals.
- Ensure environmental regulation of manufacturing recognizes the environmental benefits of utilizing renewable chemicals throughout such processes.



## **BUY "GREEN"**

convert agricultural and other renewable or waste feedstocks into everyday consumer products, thus reducing our dependence on petrochemicals and growing a green American economy that is more resilient and self-sustaining. A new approach to manufacturing will also help rebuild our national economy and workforce in a way that addresses climate change and enhances human health through improved air quality. To deploy biobased technologies and products and create more sustainable supply chains, we should take immediate steps to:

Biobased manufacturing uses biology to

- Direct federal agencies and their contractors to buy biobased products.
- Redirect or reallocate available funds to existing federal programs to promote the use and consumption of biobased products.
- Encourage or incentivize the use of existing or future COVID-19 relief and recovery funding to purchase biobased products to meet the demand for personal protection equipment, sterilizing, and cleaning products, and with respect to broader efforts to "build back better."

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#### **DEPLOY SUSTAINABLE FUELS**

Liquid biofuels provide a readily available technology for reducing transportation air pollution and enabling value-added agriculture to be a key part of the solution to climate change. Supporting the production and deployment of sustainable fuels is essential to significantly reducing emissions in automobiles, planes, ships, and other forms of transportation, while also creating quality jobs across rural America. Specifically, the Biden Administration should:

- Cease issuance of Renewable Fuel Standard (RFS) Small Refinery Exemptions to unqualified refineries.
- Build on the success of the RFS to develop and implement a Low Carbon Fuel Standard that is technology and feedstock neutral and ensures agriculture and biofuels are part of the solution to reducing emissions.
- Direct agencies to advance stalled pathways and facility registrations for advanced and cellulosic biofuel technologies.
- Instruct federal agencies and their contractors to purchase sustainable fuels in ground, air, and marine transportation.



#### REGAIN AMERICA'S GLOBAL LEADERSHIP AGAINST CLIMATE CHANGE

The United States must reestablish its global leadership in the fight to halt climate change through increased engagement with international allies, and by re-joining international agreements to decrease greenhouse gas emissions. Further, as the United States works with its allies to set new and ambitious climate agendas, it is imperative that biotechnology be treated and incentivized as a key solution to climate change and sustainable development. Three critical actions to support U.S. global leadership on climate change are:

- Rejoin the Paris Accords and reaffirm
   United States leadership within the United
   Nations and other multinational entities.
- Maintain American global leadership
  in innovation, broaden access to such
  innovations around the world, strengthen
  global rules on intellectual property, remove
  tariff and non-tariff barriers to the trade
  of biotechnology products, encourage
  regulatory harmonization, and enable the
  free flow of biological data across borders.
- Place biotechnology at the center of U.S. trade policy to promote sustainability and address challenges like climate change through innovation and technology.

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