



April 29, 2021

Hon. Thomas J. Vilsack, Secretary of Agriculture
c/o Seth Meyer, Chief Economist
United States Department of Agriculture
1400 Independence Avenue, SW
Washington, DC 20250

Submitted virtually via [regulations.gov](https://www.regulations.gov)

Re: Notice of Request for Public Comment on the Executive Order on Tackling the Climate Crisis at Home and Abroad [Docket No. USDA-2021-0003]

Climate change is one of the greatest environmental, social, and economic challenges facing the world today. According to the foremost experts on the topic, the world has only a short window of time to slow and reduce the harming effects of society's impact on the planet. The United Nations Intergovernmental Panel on Climate Change (the "IPCC"), the leading authority on climate science, notes that the world must find a way to reduce global warming in the coming years or face potentially irreversible impacts. The IPCC also states that "a sustainable forest management strategy aimed at maintaining or increasing forest carbon stocks - while producing an annual sustained yield of timber, fiber, or energy from the forest - will generate the largest sustained mitigation benefit for climate change.¹" In other words, forests are crucial to meeting our carbon emissions targets and addressing climate change. Governments around the world have been implementing climate change solutions for heat and power like biomass and bioenergy for years with positive results. The United States lags behind.

The United States, once the leader in addressing climate change, has fallen behind. Thankfully, President Joseph Biden's vision and leadership have placed the United States once again at the forefront. To successfully mitigate the harmful effects of climate change, the United States – and the world – must deploy every feasible technology to provide heat and power and decarbonize the economy while keeping American workers at work and industries innovating. President Biden's commitment to achieve a 50%-52% reduction in greenhouse gas emissions by 2030 is bold, and only workable if an "all in" strategy that includes bioenergy is executed. U.S.-based manufacturers – powered by domestic "green collar" jobs - have a strong track record as well as the resources and expertise to deliver the benefits of sustainably sourced, renewable biomass to many sectors of the U.S. economy. Right now, the world needs more renewable energy, not less. Right now, the United States has the opportunity to lead the world as we collectively take on to solve this global challenge together.

¹ https://archive.ipcc.ch/publications_and_data/ar4/wg3/en/ch9s9-es.html

Enviva's mission is to displace fossil fuels, grow more trees, and fight climate change. Enviva is the world's largest producer of sustainable wood biomass, which serves as a ready, low-carbon alternative to fossil fuels that is being deployed to meet global demand for electricity and heat. Without healthy and growing forest stocks, we cannot succeed. Therefore, Enviva plays a critical role in promoting sustainable forest management and forest growth while helping the world's energy producers substantially reduce their carbon emissions. Enviva primarily sources its wood from privately owned working forests in the Southeast of the United States that are managed to continually provide a stream of forest products over time. We believe that only good, sustainably sourced biomass is suitable for energy use, and we only source from forests and feedstocks that are sustainably managed and harvested. We do not take wood from lands that will be converted to other uses or from harvests that might threaten endangered species or harm biodiversity. We work with conservation organizations where we operate to ensure that our operations do not negatively impact forest areas with high conservation value (HCV). Enviva primarily exports its wood biomass, supplying markets in the United Kingdom, the European Union, the Caribbean, and Japan. Our biomass enables global utilities to reduce carbon emissions from incumbent fossil fuels by more than 85% on a lifecycle basis, and we are helping countries and consumers achieve the transition to dispatchable baseload renewable energy while keeping U.S. forests healthy and growing and creating "green collar" American jobs in the rural United States.

We only use biomass from forest landscapes that have stable or growing carbon stocks such as the U.S. Southeast where we operate, and because such forest landscapes are continually re-sequestering the carbon, the atmosphere does not experience a net increase in carbon. **This is key to understanding the full climate value of America's wood basket: our working forests are sequestering more carbon than is lost from harvest (in fact, it is the market demand for product that leads to that net growth), and our biomass harvested from those forests is displacing carbon in an entirely different sector: energy.** As of 2019, we estimate that our biomass had helped in displacing the emissions of 31 million tonnes of carbon since our US operations began in 2011. This is the "double whammy" climate benefit of U.S. biomass.

President Biden has called on the world to accelerate efforts to address the climate crisis and has committed the United States to lead the way as it has done in other global challenges. The Biden Administration aims to decarbonize the power sector by 2035 and to meet a new ambitious GHG-reduction commitment for the United States under the Paris Agreement. As such, it is essential to maximize decarbonization opportunities, including in the industrial sectors of cement and steel, by taking advantage of all available sectors and technologies.

American forests should be at the forefront of these efforts. That means we must **both** ensure that our forest stocks are growing and sequestering more and more carbon, **and** utilize forest resources to help decarbonize *other sectors*. For private working forests in the United States, demand for forest products leads to more forest growth. Growing markets for forest products that help decarbonize other sectors provide a double benefit. Wood pellets displace fossil energy. In addition, as highlighted by recent analysis from the IPCC, the world will almost certainly have to rely on carbon direct removal ("CDR") to limit global warming to 1.5°C. Bioenergy with carbon capture and storage ("BECCS") means that the forest sector can contribute to both natural and technological CDR opportunities. And forest products can displace cement and steel, helping to decarbonize heavily carbon-intensive industries. **To do all of this, we must overcome the misconception that demand for forest products reduces forest stocks.** *USDA is uniquely positioned to dispel this misconception.*

The laws of supply and demand apply squarely to private working forests. The forest sector's direct and indirect roles in addressing climate change are not in conflict; they are synergistic. Biomass is no exception

to the laws of supply and demand. In Enviva’s sourcing regions, there is a measured positive correlation between market demand for forest products and forest growth, forest area, and carbon stocks. In the U.S. Southeast, the market demand for forest products is strong and circular – forest landowners who produce forest products as a primary use of their lands harvest trees to earn income from current demand and also plant trees and/or manage growth in anticipation of future demand – both in the near term and longer term. In this region, these dynamics lead to only about 4% of forest volume being harvested annually, while the rest of the landscape is in a cycle of planting and growth. In the U.S. Southeast, USDA’s data demonstrate that forest inventory and productivity have been increasing year over year since the 1950s, even as harvests and removals have remained relatively constant and new industries have entered the marketplace.



In addition, landowner decisions to harvest almost never result from demand for forest bioenergy. In the U.S. Southeast, a single harvest will generate material that will be used in a range of high-value to low-value wood products, which fetch a range of prices and are delivered to different markets for use in a variety of finished goods. Different products from the forest are used to manufacture different kinds of end-products based on the quality of material that comes out of the forest. Everything from lumber, boards, and tissues to labels and packaging is manufactured in the Southeast U.S. The low-quality wood – largely byproducts of the harvest for more lucrative markets – is the feedstock used to make pellets. For the stands from which Enviva purchases biomass, on average we take about 30% of what’s harvested (and considerably less than that in terms of economic value given sawtimber is worth at least twice our low-value wood sources).² The distinct majority of both the physical and economic harvest goes to other forest products facilities, such as sawmills or paper mills – and it is the combination of each of these markets

² Critics of forest bioenergy use charge that mature forest stands are clear-cut for pellets. The most common method to sell material from a tract at final harvest in a Southeast U.S. working forest is through clearcutting, and from a clear-cut comes multiple products: timber, chip-n-saw, pulpwood, and harvest residues. Only the last two products are economically feasible for biomass production. Before that final harvest is thinning on some managed forest lands, which yields small diameter, low-value material usually 15 years after forest establishment. The rare occasion when we allow for 100% of the material from a tract to come to Enviva might be, for example, when early forest establishment was done poorly and a landowner needs to clear the land early to replant for timber, or when a loblolly pine tract is cut to be replanted and restored to native longleaf pine to support biodiversity in the region.

that drives harvest decisions. While landowner strategy may change over time, biomass is unlikely to represent the highest value stream that will influence landowner decision-making.

Having said all that, Enviva does not believe all forest types are appropriate for biomass, and Enviva takes industry-leading steps to protect forest values. Enviva ensures sustainable sourcing by adhering to a Responsible Sourcing Policy (“RSP”) and by maintaining full visibility into all wood and forest feedstocks received by Enviva facilities. Adopted in 2018 and building off our prior sourcing sustainability criteria, our RSP goes beyond federal, state, and local laws and regulations and establishes additional principles to ensure forest stewardship.

Under our Responsible Sourcing Policy, Enviva:

- Requires all suppliers to comply with our expectations regarding human rights and labor, health and safety, and business conduct and ethics.
- Requires a supplier to:³
 - Attest that a forest source will be replanted or regrown as forest and will not be converted to non-forest uses;
 - Protect water quality in a harvest area by adhering to forestry Best Management Practices (BMPs); and
 - Ensure High Conservation Values (HCVs) are not threatened by harvest activities. In 2016, based on consultations with experts and other stakeholders, we identified criteria to ensure that four bottomland forest types would be protected and that our sourcing would be appropriate and compatible with regeneration in bottomland forest types.
- Establishes a process to verify supplier performance and a review process for non-compliance.
- Maintains chain-of-custody certification through several organizations including the Forest Stewardship Council (FSC) and the Sustainable Biomass Program (SBP).
- Identifies and publicly discloses data on the source of the wood Enviva receives, whether from the forest or a sawmill. Under our Track & Trace® program, we can continually monitor and audit our procurement and report publicly on our sourcing data.
- Identifies Enviva’s pledges for conservation leadership and promoting the sustainability of forest ecosystems at the landscape level; we pledge to collaborate with stakeholders to help:
 - Keep the amount of forestland stable or increasing at regional scales;
 - Conserve wetland forest ecosystems, peatland forests, and high-carbon tropical forests;
 - Address the conversion of forest types that provide high-quality habitat for at-risk species; and
 - Restore critical, threatened, or declining forest types.

Enviva prioritizes transparency and ensuring that 100% of our sourcing meets our RSP’s requirements. As such, we prepare annual Implementation Plans that identify measurable goals by which we seek to make demonstrable progress toward the commitments in our RSP and the other steps we take to ensure continuous improvement. In addition to publicly disclosing our Implementation Plans, we provide an annual Impact Report, which assesses our performance in relation to the RSP, and an annual Corporate Sustainability Report, which discloses data and other information regarding our performance against environmental, social, and governance factors (ESG) important to our business.

³ Enviva has identified that certain suppliers of forest residues and third-party suppliers of pellets as unable to immediately comply with the RSP requirements. We are working with this limited group of suppliers to identify a reasonable timeline to comply.

Beyond our operations, Enviva supports critical ecosystems in our regions through several initiatives. For example, in 2020, Enviva announced a five-year partnership with The Longleaf Alliance⁴ to protect and restore longleaf pine forests in the Southeast United States. Enviva's Forest Conservation Fund⁵ provides \$5 million under a 10-year matching grant program to conserve bottomland hardwood forest landscapes. Administered by the U.S. Endowment for Forestry and Communities, the program seeks to preserve 35,000 acres of bottomland forests.

And Enviva is walking the walk. In 2021, Enviva announced a commitment to achieve net-zero greenhouse gas emissions from our operations by 2030. Enviva aims to secure at least 50% of our electricity from renewable resources by 2025 and 100% by no later than 2030.⁶ Enviva also aims to minimize the use of fossil fuel in other parts of our operations through continued investment in efficiency and innovative processes. For any remaining emissions, we plan to secure offsets from forest sector projects in our operating regions.

Beyond climate value, biomass yields considerable economic value. Though only forming a small fraction of U.S. harvests by volume and by dollar value, in calendar year 2020, wood pellets represent the leading U.S. forest product export, providing over \$980 million in value⁷. Wood bioenergy is currently the largest agricultural sector product export to the United Kingdom. The industry directly employs thousands across the United States and supports many more jobs along the supply chain. The forest materials used to manufacture wood biomass are sourced primarily from the working forests of the U.S. Southeast. By selling forest materials for biomass manufacturing, rural landowners earn income that incentivizes them to maintain their lands as forests and enables them to pay annual taxes on their land, creating further investment and jobs in rural communities. In contrast to other U.S. regions, approximately 86% of forested land in the U.S. Southeast is owned and managed by private landowners. In the U.S. Southeast, the average size of a family forest is about 29 acres; relatively small compared to the average farm in the United States – 444 acres⁸. The ability to access forest products markets incentivizes landowners to maintain their lands as forests and in continual cycles of harvests and planting. Enviva's nine mills are located in six Southeast states, directly employing over 1,200 workers and indirectly supporting 3,000 additional jobs in our value chain from harvest operations and transportation. Many of the jobs at Enviva's facilities involve high technical skill, and a recent economic impact survey by Chmura Economics and Analytics found that that our workforce earns on average 50% more than local prevailing wages⁹.

1. Climate-smart agriculture and forestry

- *USDA Can Help Unlock the Full Potential of Forest Biomass to Help Retain and Grow Forests while Displacing Fossil Fuels and Deploying Negative Emission Technologies.*

⁴ <https://www.envivabiomass.com/sustainability/forests/conservation/longleaf-restoration/>

⁵ <https://envivaforestfund.org/>

⁶ <https://www.envivabiomass.com/sustainability/our-2030-net-zero-goal/>

⁷ <https://apps.fas.usda.gov/gats/ExpressQuery1.aspx>

⁸ https://www.nass.usda.gov/Publications/Todays_Reports/reports/fnlo0220.pdf

⁹ <https://www.envivabiomass.com/wp-content/uploads/Chmura-Executive-Summary.pdf>

We understand that biomass is a nuanced and complicated topic and at times is controversial. Unlike other renewable resources, forest bioenergy produces GHG emissions at the stack, and determining the climate impact of these emissions has been a subject of continued and unresolved debate at the federal policy level. We encourage USDA to lead a “whole of government” approach to help in define and demonstrate when forest bioenergy has a beneficial climate impact and when it has a negative climate impact. For the climate, the relevant question is whether the atmosphere is experiencing a net increase in GHG emissions from forest bioenergy. **As long as the forest landscape is not emitting more from harvested removals than it is sequestering via growth, the atmosphere does not experience a net increase in GHG emissions.** In addition to the fact that stack emissions are counterbalanced by carbon sequestration in the forest where the biomass was grown, the atmosphere benefits further from the elimination of emissions from fossil fuel use. If forest bioenergy is sourced from a forest landscape with declining carbon stocks, on the other hand, resulting GHG emissions might actually represent net increases to the atmosphere. This is why sourcing biomass from restoration projects, as we do at Enviva, is so important.

We also encourage USDA to formally assess the challenges and difficulties of using other approaches, such as stand-level accounting and “carbon debt” methods, to estimate the climate impact of forest bioenergy use. A carbon debt approach usually involves assessing how long it will take for carbon released from a given unit of forest bioenergy to be re-sequestered through the replacement growth of that unit. While such approaches may seem logical, they generally place too much emphasis on the start date of the analysis; they discount the fact that the broader forest landscape may be growing and achieving net carbon sequestration; and they tend to be built on [mistaken] assumptions of landowner behavior. By discounting all of the sequestration that occurred in the forest before it was harvested, and starting the clock at the time of combustion, the inevitable accounting result is that it will indeed take a number of years for that particular carbon to be recaptured by the forest. However, this approach does not account for the fact that harvests and regrowth across a landscape have been happening for centuries already and are dynamic, such that accounting for forest landscape dynamics must be based on the integrated effect of all of the simultaneous harvest and regrowth events occurring in that wood basket. Because these assemblages of stands are all harvested at different times, the more appropriate way to think about the “carbon debt” clock is to overlay multiple stands on the same graph, with overlapping cycles of growth and harvest. If the overall forest landscape is at a steady state (or net growing), each harvest event is compensated simultaneously by regrowth occurring elsewhere on the landscape. **And again, much of that regrowth is happening precisely because of demand (and harvest). Far from being penalized as a negative carbon event, harvests in sustainably managed forest landscapes return positive carbon value (and then further carbon benefit for biomass when used to displace fossil emissions in the energy sector).**

- *USDA Can Convene Stakeholders to Develop Consensus Understanding of Climate-Smart and Sustainable Forest Bioenergy and Opportunities for Fossil Fuel Displacement through Forest Bioenergy*

Enviva encourages USDA to convene stakeholders to define “climate smart” in the context of forest bioenergy and in an effort to give potential users of bioenergy certainty that forest bioenergy use can respect forest and climate objectives. As such, we suggest potential convenings:

- *Examine forest bioenergy supply resources across U.S. regions and identify parameters to ensure sustainable sourcing.*

- *Address stakeholder and policy need for methodologies for determining the climate impact of forest bioenergy use and the opportunities and challenges involved in different approaches.*

2. Biofuels, bioproducts, and renewable energy

- *USDA Can Encourage the Use of Forest Bioenergy as Viable, Near-Term Resource to Achieve Decarbonization in the Electric and Heating Sectors*

Forest materials derived from working forests have the potential to displace fossil fuel use across the economy. While only playing a small role today, forest-derived transportation fuels, which could take the form of bio-crude oil, cellulosic biofuels, hydrogen, or ammonia, and forest-derived bioproducts, which can replace products like cement and steel, are options for decarbonizing economic sectors that have not yet had much success in addressing their carbon impact, such as cement and steel and other industries. While we support further research and development efforts to take advantage of these opportunities, we will focus our comments on the role of forest bioenergy use in the electric and heating sectors.

Shifting the U.S. electric grid to run on 100% clean energy by 2035 will require rapidly deploying new clean energy generation capacity. In 2020, the U.S. electric grid relied on fossil resources to provide approximately 60% of total generation, with renewables only providing roughly 20% of total generation.¹⁰ While the United States has deployed numerous gigawatts of new wind and solar capacity in recent years, the electric grid will need to meet 365/24/7 availability when variable resources are not available. Today, the grid mostly relies on fossil resources to provide such balancing. Demand-side management, energy efficiency, and energy storage can help in mitigating the time periods when wind and solar are not available, but all face potential limits. For example, even as the cost of storage becomes cheaper, deploying more storage adds to system costs, and more storage capacity lowers the average utilization of an individual storage asset, which can undercut the case for investing in more storage. As such, there needs to be greater attention on deploying new firm and dispatchable low-carbon resources. Wood bioenergy can be one such resource and one that complements variable wind and solar by helping to integrate higher shares of variable generation. Though less than 1% of total generation in the United States today, wood bioenergy is already a viable and financeable feedstock for electric utilities and can be used in existing infrastructure to displace fossil generation or with new-build facilities. Given the concentration of wood bioenergy supplies in certain regions and rural areas, wood bioenergy may have particular appeal in certain locations where other clean resources may not be available. The transition from coal to wood bioenergy enables an existing coal-powered facility to stay online, essentially recycling it and preventing the need to invest millions-of-dollars into a new power station, while keeping U.S. jobs and the associated industrial support jobs and communities intact. This is something that has already been successfully accomplished in the U.K. as well as in the E.U.

The United States must also accelerate the decarbonization of the heating and industrial sectors, where relatively few alternatives have emerged to compete with fossil resources on a cost basis. Electrification may be possible for many industries, but not in all applications. Similar to the electric sector, wood bioenergy stands as a ready alternative to incumbent fossil use.

To take advantage of wood bioenergy and immediately displace fossil energy use in the electric and heating sectors and across the U.S. industries, USDA should:

¹⁰ <https://www.eia.gov/energyexplained/electricity/electricity-in-the-us.php>

- *Work with DOE to provide forestry sector expertise on efforts to decarbonize both electricity and heat.*
 - *Provide research and analysis aimed at helping electric utilities and industrial users of heat evaluate the potential of forest bioenergy to replace fossil energy use in their portfolios.*
 - *Engage rural electric co-operatives to consider forest bioenergy generation opportunities and provide economic assistance to support the conversion of coal generation to bioenergy, particularly through the Rural Utilities Service.*
 - *Sponsor workforce development initiatives, especially in the rural areas, and provide technical assistance and expertise to support the deployment of wood bioenergy projects in rural communities.*
 - *Serve as a resource to Congress and other Executive Agencies so that they have access to information and industry knowledge about the benefits of the forestry sector and bioenergy in decarbonization.*
- *USDA Can Collaborate with Other Federal Agencies to Support the Development of Pilot-Scale and Commercial-Scale BECCS Projects with Forest Bioenergy*

The promise of BECCS means that forests can magnify their role in meeting global climate objectives and can serve as the basis of needed negative emissions to limit global warming to 1.5°C. While forest bioenergy faces challenges in the U.S. marketplace against conventional fossil fuels, the ability to deliver negative emissions provides value that can help in facilitating project development. The United States is already the global leader in deploying carbon capture for commercial-scale power and industrial facilities and developing carbon transport and storage infrastructure. Given its abundant and sustainably sourced forest resources and its well-developed forest products industry, the United States should assume leadership in developing commercial-scale BECCS projects at home.

To help realize the potential of BECCS, we encourage USDA to take several steps:

- *Assist DOE in its establishment of a Carbon Removal Research, Development, & Demonstration program that will evaluate the potential of BECCS to deliver negative emissions in the United States, as called for in the Energy Act of 2020.*
- *Encourage and assist DOE to pursue a BECCS-based project; the Energy Act of 2020 authorized new funding for DOE to award grants to private sector developers to prepare front-end engineering and design (FEED) studies and develop large-scale carbon capture pilots and commercial-scale demonstration projects. Given the need for negative emissions solutions, DOE should prioritize BECCS demonstration efforts among its portfolio of supported carbon capture projects.*
- *Work with other federal agencies including DOE and the Department of the Interior to identify suitable locations on federal lands for the permanent geologic storage of captured carbon and assist in the permitting of carbon storage projects on federal land.*
- *Engage with Congress to insure the correct legislative, regulatory, and incentive framework exists to test and implement BECCS nationally.*

3. Catastrophic wildfire

- *USDA Can Encourage the Mitigation of Wildfire Risk through Thinnings that Produce Materials for Use as Forest Bioenergy*

While Enviva’s operations currently center on the U.S. Southeast where the risk of catastrophic wildfire is not as extreme as in the Western United States, we believe that responsible forest management involves practices such as periodic thinning and fuel reduction to decrease the potential for wildfire catastrophe. Using wood biomass derived from these thinnings to displace fossil fuels and protect forests could be a strong market-based tool to mitigate fire risk in areas of high concern. And importantly, while some promote the idea of protecting forests by discouraging management and production of forest products, unmanaged forests present greater wildfire risk than managed forests. USDA’s support for a well-managed forest products industry and its role in dispelling misconceptions around working forests and biomass will have the added effect of avoiding dangerous fuel buildup, even in the U.S. Southeast.

4. Meeting the needs of disadvantaged communities through USDA’s climate strategy

➤ *USDA Can Encourage the Growth of Rural Communities through Support of Green Collar Jobs*

The location of Enviva’s facilities is driven by the proximity to sustainable private forestland and logistics options. Thus, Enviva’s footprint is located primarily in rural communities, many of which face on-going economic challenges. Our demand for forest materials sustains private landowners who rely on income from harvests to maintain livelihoods and keep forests as forest. Enviva’s positive impact is not only enjoyed by landowners. Enviva directly employs over 1,200 employees and supports an additional 3,000 jobs across nine manufacturing plants in seven Southeastern states, and we are growing our footprint to two additional sites. In the coming year Enviva will create an annual economic impact of nearly \$3 billion in and around the communities we operate in. Enviva employees, on average earn more than 50% higher wages than others in our communities. This higher wage ripples across the rural communities allowing increased spending on groceries, real-estate, medical providers, and in the overall economy. Our presence helps to economically lift the entire community and the quality of life of its residents.

Enviva is guided by its values: dedicated to improving the lives of people and improving our forests, acting honestly with the highest degree of transparency, thinking strategically, and measured in our actions. Applied to community engagement, these themes create direction, parameters to operate, and standards to uphold. In the communities in which Enviva operates, Enviva is typically one of the larger corporate entities in what is otherwise a rural area. Philanthropic engagement through volunteerism and direct funding is not only essential, it is core to Enviva’s operations and important to the local communities. These communities are home to Enviva’s associates, neighbors, and business partners. There is no better way to demonstrate commitment to a community than to voluntarily and strategically invest in it. Enviva is determined to make a positive lasting impact in the communities it calls home. Enviva representatives regularly meet with community and elected leaders in our operational footprint to 1) learn the needs of the community and 2) identify empowering partnerships to advance community goals or fulfill a need. In 2020 alone, these conversations resulted in countless activities, including Enviva providing WiFi and computers for distance learning during Covid-19 lockdown, providing essential PPE (Personal Protection Equipment) to first responders and community residents during the pandemic, funding the renovation of a defunct building into an afterschool teen/STEM center, ensuring local rural fire departments have the technology to keep everyone safe, the rehabilitation of walking trails, parks, and playgrounds, and ensuring that every day – not just holidays – the most vulnerable around us have a healthy warm meal to share with their family.

To support rural communities and create additional green collar jobs, USDA should undertake and publish an analysis of communities with an ample supply of sustainable forestry and multiple logistics options and match these locations to nearby coal power plants, which could be converted to bioenergy or industrial processes in need of a low-carbon method for producing heat or electricity. USDA should work with sister Agencies and the Congress to develop opportunities to identify potential biomass manufacturing locations and nearby decarbonization opportunities. In doing this, USDA will be supporting rural America, strengthening forests, and working to reduce greenhouse gas emissions.

Conclusion

Enviva thanks President Joseph Biden, Secretary Tom Vilsack, and United States Department of Agriculture for its efforts to engage stakeholders and identify steps to accelerate activities to address climate change. **As the Biden Administration sets new ambitious goals and timelines to reduce GHG emissions, we emphasize that U.S. forests are a critical element of success. Maximizing their role in addressing climate change means ensuring that forest stocks are growing *and* utilizing forest resources to help decarbonize *other sectors*.** We encourage USDA to help unlock the full potential of forest biomass to help retain and grow forests while displacing fossil fuels and deploying negative-emissions technologies, and we specifically recommend that USDA:

- *Convene Stakeholders to Develop Consensus Understanding of Climate-Smart and Sustainable Forest Bioenergy and Opportunities for Fossil Fuel Displacement through Forest Bioenergy*
- *Encourage the Use of Forest Bioenergy as Viable, Near-Term Resource to Achieve Decarbonization in the Electric and Heating Sectors*
- *Collaborate with Other Federal Agencies to Support the Development of Pilot-Scale and Commercial-Scale BECCS Projects with Forest Bioenergy*
- *Encourage the Mitigation of Wildfire Risk through Thinnings which Produce Materials for Use as Forest Bioenergy*
- *Seek out opportunities to use bioenergy as a mechanism to grow rural economies, create green collar jobs, and displace fossil fuels*

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