Policy Recommendations

Overarching policy recommendation:

Redirect resources currently supporting manure biogas (i.e., grants and loans for digesters, technical assistance, tax credits, and incentives for biogas production) to more cost-effective methane reduction solutions (outlined in greater detail below) that do not exacerbate environmental injustice and industry consolidation. Instead, policies should support a just transition away from factory farming to regenerative agriculture, and away from fossil fuels to truly renewable energy.

Additional policy recommendations:

- **1** Do not create new funding streams or other policy incentives for factory farm gas. At a minimum, federal and state governments should not add to the windfall of funding and incentives already available to support manure biogas detailed in **Section III** of this report.
- 2 Prevent double-dipping between subsidies, tax incentives, and programs like the Renewable Fuel Standard and California's Low Carbon Fuel Standard. Related, ensure GHG reductions attributed to manure biogas are not double-counted. The ability of biogas developers to stack federal and state funding and incentives to support biogas production has created a manure gold rush and exacerbated the perverse incentives discussed in **Section IV**. Doublecounting the benefits across these programs (i.e., attributing the same GHG reductions to more than one policy) has inflated the impacts of each program.

T Set a specific methane reduction target and pathway for the agricultural sector aligned with the Global Methane Pledge. To fulfill the U.S.'s obligation under the Global Methane Pledge to reduce global methane emissions by at least 30% from 2020 levels by 2030, the Biden administration should establish a methane reduction goal and detailed, evidence-based reduction strategies specific to the agriculture sector in line with that ambition. As discussed in **Section V**, its current proposed strategy would reduce methane emissions by only 9% in 2030 in a best-case scenario. States should also set their own goals for reducing methane emissions from agriculture and develop plans and policies to achieve those reductions.



- 4 Require and improve methane monitoring and reporting from livestock operations. For more than a decade, Congress has prevented EPA from requiring reporting of GHG emissions from manure management through an Appropriations rider. Measuring and publicly disclosing GHG emissions from CAFOs is a critical and obvious first step to managing these emissions. EPA should also fund technological innovation to improve methane monitoring from livestock facilities, without which we cannot accurately assess the efficacy of agricultural methane reduction interventions.
- **5** Pursue agricultural methane reduction strategies that support environmental justice and fair markets for producers:
 - Methaneemissions from industrial livestock facilities should be **monitored, publicly disclosed, and regulated** in a way similar to how the administration has approached regulating methane emissions from the oil and gas sector. Policies should be targeted toward reducing methane emissions from agriculture, not toward maximizing biogas production. For example, EPA could grant a petition asking it to list and regulate industrial animal agriculture operations as stationary sources of methane under Section 111 of the Clean Air Act.²⁰¹
 - Leverage procurement to shift federal purchasing and foodservice toward plant-forward menus, which have drastically lower embedded methane emissions. A recent report found that methane emissions from one year of direct federal food purchasing equaled 5.8 million metric tons of methane emissions (in CO_2e).²⁰² Cutting those in half by replacing some beef, pork, and cheese purchases with plant-based sources of protein would eliminate 17.3 million metric tons of methane in CO_2e between 2025 and 2030 and save food costs.
 - Prioritize funding for pasture-based and smaller-scale integrated livestock production in USDA conservation programs such as EQIP and REAP. Insofar as USDA's conservation programs

continue to fund CAFOs, grants and loans should be restricted to cost-effective alternative manure management practices that support environmental justice goals.

- Implement policies such as the Farm System Reform Act²⁰³ that **support a just transition to pastured animal production and plant-based food production,** including placing a moratorium on large factory farms and providing voluntary buyouts for farmers who want to transition away from operating a CAFO.
- **Reduce food waste.** Landfills accounted for 15% of U.S. methane emissions in 2019, and EPA estimates that food waste constitutes 24% of materials in landfills. The food waste reduction organization, ReFED, recommends policies and programs that "target food waste prevention at the source" and has modeled pathways to reduce food waste by 50% by 2030.²⁰⁴



- 6 Regulate waste from both CAFOs and digesters, including treatment and application of digestate. As discussed in Sections II and IV, CAFOs and digesters are not subject to sufficient oversight and should be comprehensively regulated under the Clean Air Act, Clean Water Act, and state environmental laws. Enforcement of the minimal current requirements must be strengthened.
- Require disclosure of basic data from 7 CAFOs and digester operators, and fund and conduct research to assess the impacts of manure biogas policies on methane emissions, industry consolidation, and rural **communities.** As we discussed, the research we presented in Section VI provides initial evidence for the incentive to increase herd sizes to maximize manure biogas production and for the overestimating of GHG reductions from digesters, but further research utilizing more-reliable data is needed. Congress, EPA, and USDA should prioritize further research to explore these trends, including by requiring the disclosure of basic information from CAFOs and digester operators, including facility locations, herd sizes, and manure management strategies and by directly monitoring air and water pollution from CAFOs with and without digesters.
- **R** In instances where public funds have already been designated to support manure biogas, grants and loans should include conditions and exclusions to mitigate public health and environmental harms and increase transparency. Unfortunately, as we laid out in Section III, a significant amount of public money has already been directed toward subsidizing manure biogas production. To increase transparency and mitigate harms to communities from the myriad public health and environmental risks associated both with CAFOs and manure biogas, federal grants and loans should exclude the most harmful projects and place conditions on all projects. For example, operations with a history of environmental or worker safety violations or operations that cannot demonstrate sufficient acreage of farmland available to apply digestate should be ineligible for grants and loans. All applicants should be required to provide an Environmental Justice and Community Impact Assessment conducted by an approved third party to assess cumulative impacts of producing manure biogas. Recipients of grants and loans should be prohibited from expanding their herd sizes and required to use best available technologies and management practices to limit pollution. Adherence to conditions must be ensured through robust enforcement.

