21 September 2023

Dear Ms. Bogatyreva, Mr. Jagwani, Mr. Albuquerque de Almeida, and Ms. Kaestner

Re: Project Number 46415, MHP Loan 2023

We are writing to share our concerns in relation to project number 46415, which proposes to provide up to USD 30 million to MHP SE subsidiary, Vynnytska Ptakhofabryka LLC, for the upgrade and expansion of its manure-to-energy plant.

Our concerns are primarily related to the risks of methane leakages; the unaddressed problem of nutrient pollution; and antimicrobial usage, which can negatively impact the efficacy of anaerobic digestion. At the same time, MHP operations are currently the subject of ongoing, unresolved complaint processes with the IFC CAO and EBRD IPAM, which raises significant, additional concerns about the company's conduct and ability to sufficiently monitor and mitigate the adverse impacts of its operations.[1]

In general, we support IFC's commitment and contribution to supporting global food security and the country of Ukraine during this devastating period. The IFC certainly has a role to play in supporting "the resilience and rebuilding of Ukraine".[2] At the same time, the war does not erase the existence of other pressing social and environmental challenges, within Ukraine and globally. During this time of vulnerability and instability, it is perhaps even more important to ensure that the projects IFC supports in Ukraine do not inadvertently contribute additional harm.

<u>GHG emissions and risk of methane leakage</u>
Project disclosures state that the biogas facility expansion is part of MHP's decarbonization strategy (which we interpret as encompassing reduction of all GHG emissions, i.e. also methane).[2] Research shows that manure biomethane does have promising GHG reduction potential in the short term, providing certain parameters are met, including prevention of leakages.[3] However, the same research also shows that manure biogas/biomethane risks being "even worse than fossil fuels in terms of climate impact" in the longer term.[3] Specifically, high leakage rates would result in "minimal to zero climate benefits".[5]

Research also shows high uncertainty and variability in the estimated GHG reduction potential or negative GHG intensity of manure biogas/ biomethane (i.e. avoided emissions, which means lower emissions from manure biomethane compared to emissions from typical manure management).[6] This means that it is by no means guaranteed that this project will support MHP's strategy to address GHG emissions.

Overall, this points strongly to the need for IFC to, at the very least, introduce stringent requirements or safeguards to limit the climate risk of MHP's biomethane production. A failure to do so risks substantial negative (Category A) impacts, and undermines MHP's decarbonization goals. From the mitigation measures detailed in the Environmental and Social Review Summary of the project, it is unclear whether the planned Environmental

and Social Management Plan (ESMP) is sufficiently aware of, and responding to, the risk of leakages. Disclosures state that the ESMP will "document mitigation and monitoring measures for ambient air quality, point source air emissions, odor, effluent parameters, solid and hazardous waste management, workplace leading and lagging indicators and noise monitoring".[7] It is unclear whether "point source air emissions" encompasses monitoring for leakages, and whether this measure is sufficient. The ESMP does not indicate that it will ensure that the biomethane facility is reducing GHGs in line with MHP's decarbonization plan, or IFC's commitment to Paris-aligned lending.

The risk of substantial leakage in the MHP biogas/biomethane facility in Vasylivka challenges IFC's classification of the loan as Category B. Leaks would emit methane into the atmosphere, an impact that is neither "largely reversible" or "readily addressed through mitigation measures".

Nutrient (nitrogen) pollution

Alongside GHG emissions, there are other significant impacts that are unaddressed. Anaerobic digestion can address odour emissions and pathogens in manure, but cannot solve or prevent nutrient pollution of soil or water, even where manure is converted to liquid fertiliser through the anaerobic digestion process.[4]

Nutrient (nitrogen and phosphorus) pollution is one of the most severe and concerning environmental impacts of industrial animal agriculture.[8] The contribution of livestock to nutrient pollution is well-established, as is the scientific recognition that humanity has transgressed the safe "planetary boundaries" for nitrogen and phosphorus pollution.[9][10]

Manure and liquid fertilizer from manure are key sources of nutrient pollution from livestock.[11] Unfortunately, anaerobic digestion does nothing to solve or prevent the negative impact of nitrogen contamination to soils, because it "does not reduce the increased concentrations of nitrogen in the surface and groundwater caused by the spatial concentration of livestock".[4] To address this, anaerobic digestion must be combined with wastewater units. IFC disclosures do not mention any requirement or support from IFC for MHP to develop wastewater treatment alongside its biomethane expansion. Neither do they disclose whether nutrient management stewardship (as the digestate from the biomethane production is used as liquid fertiliser on local farms) is part of the Environmental and Social Management Plan.[12]

Considering Ukraine's potential accession to the EU and governments globally responding to the crises of nutrient pollution, it is particularly critical that IFC's investments in agricultural operations prevent and address this issue. The EU Nitrates Directive requires member states to introduce measures to prevent and reduce pollution from nitrogen (nitrates).[13] IFC must consider its support of MHP in light of these requirements and international best practice.

Interaction between animal welfare, antimicrobial usage and biomethane production

The potential of biomethane generation in MHP's Vinnytsia poultry operations is predicated on the stocking densities of intensive poultry production. Research suggests that biogas/biomethane production from manure is only viable for the largest, most

intensive livestock systems - i.e. where sufficient manure is produced to feed the waste-to-energy unit.[4] These are the systems characterised by the highest stocking densities and greatest animal welfare concerns. High use of antimicrobials is a typical enabler of these systems, through prophylactic use to reduce disease incidence and mortality, alongside growth promoting effects.[14] In Ukraine, research has identified "dangerous uncontrolled use of antibiotics in poultry farming" and the corresponding presence of multi-drug resistant bacteria in industrial poultry and poultry products.[15][16] Drug resistant bacteria, and their genes, can cause human infections at any stage of the food production cycle, and contribute in general to the "silent pandemic" of antimicrobial resistance.[17] Importantly, anaerobic digestion does not necessarily neutralise antibiotic-resistant bacteria or genes.[18]

The high antimicrobial usage that is characteristic of intensive production also inadvertently compromises biomethane production. Significantly: high concentrations of antimicrobials decrease the efficiency of anaerobic digestion.[19] A high reliance on antibiotics thus not only threatens to exacerbate the global public health threat of AMR but also diminishes the functionality of the biodigesters themselves.[20][21] This also challenges the validity of assigning a risk category to only this project - rather than the entire poultry complex to which the biomethane production is attached. IFC must consider the impacts of the production complex as a whole.

Overall, IFC must address the essential characteristics of intensive livestock systems - i.e. compromised animal health and welfare, high stocking densities, and reliance on antibiotics. Failure to do so is a failure to ensure that the waste-to-energy facilities help MHP sufficiently mitigate its GHG emissions.

The proposed loan must, at least, be delayed until our concerns, as well as ongoing community complaints, are addressed. Specifically, we request a response that outlines:

- How MHP prevents, monitors and measures leakages in its biomethane production system, to ensure that it is not a net emitter of GHG emissions;
- How MHP treats digestate and wastewater at the Vinnytsia site, or otherwise addresses the nutrient pollution that is not tackled by waste-to-energy generation;
- How IFC and MHP understand and manage the relationship between antimicrobial usage and anaerobic digestion at the Vinnytsia site;
- How IFC and the ESMP addresses these issues (leakages; nutrient pollution; wastewater treatment; and antimicrobial resistance in the animal populations, their manure, and the site more broadly);
- What MHP's decarbonization plan entails (which is referenced but not disclosed) and the role of IFC-supported biodigesters in that plan.

As discussed above, biomethane production is an uncertain and risky GHG emissions mitigation strategy. Anaerobic digestion also cannot mitigate - and may in fact worsen - the myriad other harms involved in industrial livestock production. This makes it all the more troubling that IFC is investing in this infrastructure, and the further entrenchment

of this highly inefficient and unsustainable industry, which threatens planetary boundaries and the achievement of global goals (Paris, Kunming-Montreal, the SDGs).

Given the interrelated global challenges we face, IFC's investments must seek to solve multiple problems together. We urge IFC to rethink its continued support of intensive animal agriculture operations, and invest instead in supporting better systems.[22]

Your sincerely,

The Stop Financing Factory Farming coalition

TO:
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Lisa Kaestner - Country Manager, Ukraine and Moldova

CC:
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References

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2. https://disclosures.ifc.org/project-detail/SII/46415/mhp-loan-2023
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4. Lauer et al. (2018) "Making money from waste: The economic viability of producing biogas and biomethane in the Idaho dairy industry". Available at: https://doi.org/10.1016/j.apenergy.2018.04.026
5. Zhou et al, pages 11, 18-19. Zhou et al. model pathways of the GHG intensity of different biomethane production options. "High" leakage is considered to be more than the 10% maximum leakage rate considered in the model's sensitivity analysis. It is important to note that the model did not incorporate an estimate of leakage beyond the biogas production and upgrading stages. I.e. additional leakage may occur at other stages (e.g. during storage and transportation), as well as a higher (>10%) leakage rate being plausible for the key production stages. In practice, if substantial leakages are occurring anywhere in the supply chain, "it is likely that biomethane, especially manure biomethane, would provide minimal to zero climate benefits on a 100-year timescale" (page 19).
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13. See for example https://environment.ec.europa.eu/topics/water/nitrates_en
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20. https://www.who.int/news-room/fact-sheets/detail/antimicrobial-resistance
21. See also World Bank Group recognition of antimicrobial resistance in the context of One Health: https://www.worldbank.org/en/topic/agriculture/brief/safeguarding-animal-human-and-ecosystem-health-one-health-at-the-world-bank
22. See the executive summary and recommendations here: https://foe.org/resources/climate-misalignment/