## ANIMAL AGRICULTURE'S IMPACT



Unsustainable use of freshwater for feed production, animal care, and slaughterhouses contributes to water scarcity. It's depleting resources needed by future generations.<sup>1</sup>



Poor air quality results from the localized release of significant quantities of toxic gases and odorous substances. In the U.S. alone, more than 83 million tons of manure are produced annually from animals.<sup>2</sup>



Livestock, for the production of meat and milk, is the world's largest user of land resources, with pasture and land dedicated to the production of animal feed representing 70% of the total agricultural area.<sup>3</sup>



Red meat (beef, pork, and lamb) and dairy production together account for nearly half of the greenhouse gas emissions associated with the U.S. food supply chain.<sup>4</sup>



If global trends in meat and dairy intake continue, global mean temperature rise will exceed 2°C, even with dramatic emissions reductions across non-agricultural sectors.<sup>5</sup>



Different food groups exhibit a large range in greenhouse gas (GHG) intensity; on average, red meat is especially GHG intensive. Livestock production accounts for an estimated 14.5% of global GHG emissions from human activities.<sup>6</sup>



Studies suggest that substantial global reductions in meat intake by 2050 could reduce agriculture related emissions on the order of 55-72% with greater reductions from also reducing dairy and eggs.<sup>7</sup>



A global reduction in meat and dairy intake by 75% by 2050 could reduce emissions by 7.4 gigatons, an amount greater than the emissions from the entire transportation sector in 2010 (7 gigatons).<sup>7</sup>



<sup>&</sup>lt;sup>1</sup> Burkholder J., Libra B., Weyer P., Heathcote S., Kolpin D., Thorne P.S., Wichman, M. (2007). Impacts of Waste from Concentrated Animal Feeding Operations on Water Quality. Environ Health Perspect 115(2): 308-12. <sup>2</sup> Halden, R.U., Schwab, K.J. (2008). Environmental Impact of Industrial Farm Animal Production. Pew Commission on Industrial Farm Animal Production. <sup>3</sup> Gerber, P.J., Steinfeld, H., Henderson, B., et al. Tackling Climate Change through Livestock – A Global Assessment of Emissions and Mitigating Operationities. Rome: Food and Agriculture Organization of the United Nations; 2013. <sup>4</sup> Weber, C.L., Matthews HS. Food-Miles and the Relative Climate Impacts of Food Choices in the United States. Environ Sci Technol. 2008;42(10):3508-13. Engelhaupt, E. Do Food Miles Matter? Environ Sci Technol. 2008;42(10):3482. <sup>5</sup> Kim, B., Neff, R., Santo, R., Vigorito, J. The Importance of Reducing Animal Product Consumption and Wasted Food in Mitigating Catastrophic Climate Change. Johns Hopkins Center for a Livable Future; 2015. <sup>5</sup> Weber et al., 2008; Gerber et al., 2013. <sup>7</sup> Kim, Brent, Neff, Roni & Santo, Raychel & Vigorito, Juliana. (2015). The Importance of Reducing Animal Product Consumption and Wasted Food in Mitigating Catastrophic Climate Change. Johns Hopkins Center for a Livable Future; 2015.