





Shai Weiss, CEO Virgin Atlantic The VQH Fleming Way Crawley, West Sussex RH10 9DF

October 29, 2020

Dear Mr. Weiss.

On behalf of our members and supporters throughout the United States and elsewhere, Animal Wellness Action, the Animal Wellness Foundation, and the Center for a Humane Economy write to request a substantive change in your food policy as one additional means of demonstrating your commitment to sustainability and reducing your company's greenhouse gas emissions. Specifically, we ask that you consider making plant-based meals the standard option for in-flight meal service, with meat-based options available as on-request in your "special meal" offerings.

We know this is a terribly precarious moment for Virgin Atlantic and other major U.S.-based airlines, and we understand that you are making a raft of changes to put your airline in a position to succeed and continue offering air travel service to people worldwide. In spite of these immense challenges, we are confident that you will not abandon Virgin Atlantic's commitment to sustainability. Indeed, perhaps more than ever, consumers have a steadfast view that major corporations, in the best and worst of times, must address threats to public and planetary health, from zoonotic diseases to climate change. Improved food purchasing practices are tangible ways to demonstrate your corporate commitment to sustainability and to limit your company's carbon footprint. In response to climate change's emerging threat to public health, wildlife and habitats, coastal communities, and the whole of our economy, citizens are asking governments and major corporations to address the problem in meaningful and creative ways, and that's precisely why we ask you to embrace change in your food offerings.

One tangible, collective goal for our society is to stay below the Intergovernmental Panel on Climate Change (IPCC) guideline of 1.5°C of global warming above pre-industrial levels. The aviation industry is projected to consume 12% of the global carbon budget for 1.5°C by 2050. If it fails to reach this target, its share of this budget could rise to as much as 27%.¹ The International Civil Aviation Authority (ICAO) has acknowledged the difficulties that airlines will have in cutting emissions as the aviation sector rebounds from the COVID-19 pandemic. Even with improvements in aircraft technology and alternative fuel – which will require major capital outlays at a time the industry can least afford them - the ICAO's data suggests that reducing carbon emissions from the airline industry will be a challenge.

Virgin Atlantic and other airlines have an easier pathway in changing your food purchasing practices.

The IPCC Fifth Assessment Report emphasizes the importance of plant-based diets as one critical pathway in reaching the 1.5°C goal, given the enormous footprint of agriculture, especially related to the extraordinary numbers of animals we raise for food (75 billion land animals a year). A range of studies, including one entitled *Animal Agriculture is the Leading Cause of Climate Change*, by Dr. Sailesh Rao, have determined that it's not just carbon, but also methane that must be addressed. With that in mind, using data from the Fifth Assessment Report (AR5) of the IPCC and other peer-reviewed scientific

sources, Dr. Rao concludes that animal agriculture may be responsible for more than half of all greenhouse gas emissions.

Dr. Rao shows that methane emissions from animal agriculture are responsible for more incremental global warming than the annual CO₂ emissions from all fossil fuel sources combined, including the transportation sector. The transition toward a more efficient production system built around plant production rather than animal production has the potential to sequester over 2,000 Giga tons (Gt) of CO₂ in regenerating soils and vegetation, returning atmospheric greenhouse gas levels to the "safe zone" of under 350 parts per million (ppm) of CO₂ equivalent, while restoring the biodiversity of the planet and healing the climate. Other studies. including one conducted at the University of Oxford, published in the journal, Science, conclude that transitioning to a diet that excludes animal products has the potential to reduce an individual's carbon emissions between 61 and 73%.2

Given the volume of meals that you serve, a shift towards plant-based offerings has the potential to reduce your company's greenhouse gas emissions in substantial ways. The University of Michigan Center for Sustainable Systems presents the results of a study that calculated the CO₂ emissions of certain food servings. One serving of poultry is the equivalent of emitting approximately 1.3 pounds of CO₂, while one serving of beef is the equivalent of emitting approximately 6.6 pounds of CO₂. The average CO₂ emitted per serving for foods such as rice, legumes, carrots, and potatoes is approximately 0.1 pounds of CO₂.3

Thus, replacing each serving of poultry and beef with a serving of plant-based foods would reduce your CO₂ emissions by 1.2 to 6.5 pounds. Assuming an average of 200 passengers on board a transatlantic flight in which 2 meals are served to each passenger, this equates to Virgin Atlantic saving 0.24 to 1.30 tons of CO₂ per flight. Taking into account the yearly number of Virgin Atlantic long-distance flights, the amount of CO2 (not to mention methane) would be very substantial on an annualized basis.

Of course, your business will continue to put planes in the air, and only a major re-engineering of the planes, technological improvements, alternative fuel use, and fleet replacements (all of which are costly) can allow Virgin Atlantic to reduce fossil fuel burn rates during flight. However, you can readily change your food offerings. Meat and dairy-based meals could still be offered upon a special request or upcharge. Your airline has made dramatic shifts in flight services as economics and larger circumstances have warranted, and this is one that is needed if sustainability commitments are going to be matched with practical action.

Our organizations congratulate Virgin Atlantic's leadership efforts to date on carbon emission reduction and enthusiastically support the company in a transition to more sustainable food offerings. We look forward to our continued collaboration in combating the climate crisis.

Sincerely,

Brandon Burr Food Policy Chair

Animal Wellness Action & Center for a Humane Economy Wayne Pacelle President

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^{1.} Pidcock, R. and Yeo, S. (2016) Analysis: Aviation could consume a quarter of 1.5C carbon budget by 2050. Carbon Brief.

^{2.} Poore, J. and Nemecek, T. (2018) Reducing Food's environmental impacts through producers and consumers. Science, 360 (6392); 987-992.

^{3.} Heller, M. and Keoleian, G. (2014) Greenhouse gas emissions estimates of U.S. dietary choices and food loss. Journal of Industrial Ecology, 19 (3): 391-401.