<u>Attachment 4</u> Land Grant Statement on Climate Change

INTRODUCTION

Covid-19 is evoking old lessons and instilling new ones with brutal efficiency. The last month has reminded the nation that knowledge and competent leadership matter. That collaboration and community—the collective actions of millions—matter. That Americans are capable of bold action when necessary. That immense reserves of resources and skill can be mobilized when properly led, or squandered, when misled. Equally clear is that in interconnected systems, theoretical risk becomes reality with devastating speed.

America's Land Grant colleges and universities were established in the late 1800s with a mission to expand the frontiers of knowledge and to make that knowledge available and useful for the nation. Staying true to this mission means integrating the response to critical societal needs into our core organizing principles.

Today, thousands of professionals from these institutions have a vital message: while Coronavirus has put unprecedented stress on our economy, health care system and social fabric, these relatively short-lived challenges pale in comparison to the multi-generational threats posed by climate change.

Taken in total, the scale and diversity of risk from climate change is almost incomprehensible — even to those of us who have studied it for decades. Food supplies, health, economy, governance, national security, and social stability are all at risk. Scientists, the military, financial institutions, health authorities, are unified: we are facing a climate emergency. We have one clear task: carbon emissions must be dramatically reduced, starting now. For future generations to have a chance at a decent quality of life, the nation must chart a bold new course. Immediately.

REALITY

Human carbon emissions have warmed the planet about 1°C, most of this in the past fifty years. Beyond 1.5°C warming, the consequences escalate quickly. Heat waves and extreme storms become the norm. Devastating floods and droughts both increase in occurrence. Crop failures become common. Wildfires grow in size and severity. Infectious diseases spread more rapidly. By 2 °C warming, the collapse of all coral reefs, which support a quarter of marine species and provide protein for over a billion people, will be complete. Massive forest die-offs will occur. Beyond 2°C warming, uncontrollable and potentially catastrophic shifts will shake the foundations of the natural world that is the foundation of our economy. We are woefully unprepared to adapt to these changes and many of these changes will be irreversible. Ensuring we do not exceed 1.5°C warming must be our shared goal, the organizing principle around which our collective actions are focused, from this day forward.

To keep below the 1.5°C target requires emitting no more than 340 gigatons of carbon dioxide (Gt CO_2) into the air, globally, forever. On our current path — a path we show no meaningful signs of deviating from — we will exceed this budget in just eight years. For the sake of future generations, we cannot continue on anything close to our current carbon-intensive path.

RESPONSE

Keeping climate change to a moderate risk level, below 1.5°C, requires:

1. An appropriate mindset. Emergencies require immediate action to prevent catastrophic outcomes. Climate change is an emergency. In an emergency, our notion of political feasibility adapts to what is necessary. With an emergency mindset comes...

2. Unwavering resolve. Fierce commitment is the only way to drive change. Imagine what will happen when engineers and artists, industry and farmers, entrepreneurs and government, generals and religious institutions knuckle down. First up ...

3. A rapid and fair transition away from fossil fuels. The vast majority of fossil fuels must stay in the ground. What is extracted will be burned and our 340 Gt carbon budget allows us to burn less than 5% of existing fossil fuel reserves. Two things must happen. First, putting a price on carbon emissions in the US and demanding the same of all global trading partners is the most cost-effective, market-driven way to price-in the true cost of fossil fuel use and help consumers make climate-wise decisions. Second, rationing our remaining carbon such that we don't burn through it in the next eight years buys time, while systems are transformed. Reducing emissions of the world's top 10% to the level of the average developed-world citizen drops worldwide emissions by a third. Which brings us to...

4. Massive deployment of low-carbon infrastructure. Good news: All the technology exists to rapidly decarbonize the economy. But it needs to be used at scale. Over the past 20 years renewables have merely enabled growth. Meanwhile, fossil fuel use has skyrocketed and emissions continue to rise. The nation must greatly expand use of low-carbon renewables. And we need to shift to energy-sensitive modes of urban development, transportation, building, manufacturing and food production. Leading this transition globally would create high quality jobs and strengthen the US economy. We must accelerate research and development, but we can't view future technology advances as last-minute magic bullets that will save the day. Decades of intense climate change denial, lobbying, propaganda and promises of miraculous fixes have squandered our elbow room. If Covid-19 has taught us anything, it's that tomorrow's vaccine won't stop the crisis today. We need the necessary public investments. Now. Which brings us to...

5. A whole society approach. Fairness and equity are common values that lead to healthy and productive societies. This isn't ideology, it's pragmatism. Effective citizens cannot be hungry, sick, homeless, perpetually afraid, or perpetually disaffected. The well-being of people is critical to the effectiveness of our response to climate change, and so must be an organizing principle of the response. Which brings us to...

6. Bold, courageous and honest leadership. Covid-19 has made clear that leadership matters. At all levels. In every institution. Confronting a global crisis requires unwavering, good-faith leadership, grounded in science, to build the shared understanding and whole-society commitment we need.

THE ROLE OF AMERICA'S LAND GRANT INSTITUTIONS

We are scientists and artists, engineers and historians, farmers and architects, and economists and entrepreneurs . We are educators and researchers, writers and lawyers. We are husbands and wives, sons and daughters, parents and grandparents. We are citizens, committed to our communities and our professions. And we're telling you how it is from our very truest selves. We stand to gain nothing by misleading you about our collective situation; we stand to lose everything if we do not transition to a low-carbon future, and quickly.

We understand that our own institutions must evolve as well. Today's Land Grant universities house a wealth of expertise. They comprise many of the nation's top research universities and have deep community connections through Extension programs reaching every county in every state in the nation. All the pieces are in place to make these institutions a powerful tool in solving the climate problem. We are committed to bringing these pieces together, as are millions of other researchers, educators, industry leaders, and non-profit organizations. But we can't do it alone. We need the American public to commit to addressing this emergency with us, in your actions, in supporting businesses and politicians who are committed to actionable solutions, in demanding that we support public institutions for the public good.

Covid-19 is not the global event from which we recover and move back to some historical normal. Covid-19 is the dress rehearsal, shaking things out for the true test of challenges to come. The lack of gloves, masks, gowns, ventilators — is a mass tragedy. It is also a monumental embarrassment: the most basic equipment, for a readily predictable emergency, was ordered late, incoherently and insufficiently, in the wealthiest nation in history. Much of the pain we are all feeling today could have been avoided if we had better utilized readily available information. We must use the lessons of this pandemic to build the systems that will see us through the challenges to come, to a new destination — a sustainable, vibrant society on a healthy planet.

Rob Davies, Utah State University Patrick Belmont, Utah State University Jonathan Sturm, Iowa State University Jon Oliver, Rutgers University Brian J. Frost, University of Nevada, Reno Leanne Petry, Central State University Elizabeth Dodd, Kansas State University Thomas I. Chittenden, University of Vermont From: Patrick Belmont <<u>patrick.belmont@usu.edu</u>>
Sent: Thursday, April 23, 2020 8:12 AM
To: Elizabeth Dodd <<u>edodd@ksu.edu</u>>
Subject: Re: [EXT] Re: draft of Land Grant climate Op-Ed, quick turnaround requested

Hi Elizabeth,

Attached is a clean copy of the current version. We are going to approach USA Today first (largest distribution, middle-of-the-road political readership, quick turn-around and we are able to publish it elsewhere after 48 hours). If they don't pick it up, we will send it to New York Times. Rob and I have been iterating on titles. If you have any suggestions, please let me know.

Patrick

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