## Statement of Win Smith, President of Sugarbush Resort and Trustee of The Nature Conservancy in Vermont, before the House Energy and Technology Committee regarding climate change and H.688, the Vermont Global Warming Solutions Act

## January 24, 2020

Chairman Briglin and Committee members, thank you for allowing me to testify today on climate change and H.688, which I strongly support.

My name is Win Smith, and I am a resident of Warren, Vermont. I am here today wearing the hat of a Trustee of The Nature Conservancy in Vermont and also as President of Sugarbush Resort where up to a week ago I was also the majority owner for the past eighteen years.

I know that you are all very aware of the importance of the winter sports industry to the economy of Vermont. And, as you know, we are facing a climate crisis. As the climate changes, we need to be as prepared as possible and get ahead of the curve in order to make certain that we can remain sustainable.

In my long career, I have witnessed many companies and industries that have failed to recognize and act on changing trends, ultimately rendering themselves obsolete. Others embraced change, sought opportunity, and took action, even if there was a short-term cost, and as such they remained sustainable.

I fully understand that what we do here in Vermont is miniscule compared to the issue of global carbon emissions, especially those emissions generated from coal in other areas of the United States as well as in China and India. But I think it is critically important that we do our part and set an example for others to follow. It is not only the right thing to do, but increasingly it is what our guests expect — especially the younger generation who represent our future. They want to spend their money where people are acting responsibly, and we want them to spend their money here in Vermont.

At Sugarbush we have undertaken numerous initiatives that focus on energy efficiency including renewable energy projects, installation of electric vehicle charging stations, development of energy efficient buildings, and the use of LED lighting wherever possible. With the support of Efficiency Vermont, we have reduced our energy consumption by 34.5% over the past several years.

When I first purchased Sugarbush in 2001, we had five 6,000-cubic-foot-perminute (CFM) air compressors and supplemented them with several diesel generators early in the season in order to have enough compressed air to make snow. Now we typically use only two generators, both of which use no more than 4,200 CFM each. We have reduced our annual electrical consumption by nearly 5 million kWh. We have also partnered with Green Lantern Solar on the development of five solar fields that generate 2.5 megawatts of electricity. We are working with Green Lantern and Mad River Solar on three additional solar arrays, one of which is on-site, and we continue to actively identify other opportunities for solar. We have also installed twenty-two electric vehicle charging stations at our Lincoln Peak and Mt. Ellen parking lots plus two additional chargers in the Clay Brook Hotel parking garage to support the use of electric vehicles that aim to decrease emissions in Vermont's largest pollution sector, transportation.

We at Sugarbush are also becoming more outspoken advocates for climate action directly through our public messaging and by supporting organizations such as Protect Our Winters and One Percent for the Planet. Our new owner, Alterra Mountain Company, is an industry leader in advocating for climate action, and I am looking forward to learning more from them as we continue to promote a climate-resilient company and a green resort for Vermonters and our visitors. Personally, I am increasingly active with our Nature Conservancy chapter here in Vermont.

We are doing this not only because it is what our guests want and what we want to do for the environment on which we depend, but also because we are already experiencing impacts to our business and can anticipate continued impacts in the future. I get asked all the time, "Are you seeing less snow?" or "Is your season getting shorter?" The answer is "No" and this might lead someone to say, "See, there is no climate change happening." I am here to emphatically state that this is the wrong conclusion.

We are experiencing significantly greater volatility in the weather. Last week was a good example. Two weekends ago, we experienced 50-degree temperatures and rain and suddenly went from having 100% of our trails open for skiing and riding to only 50%. We were fortunate enough to regain snowmaking temperatures and received over a foot of natural snow over the following week, so that for the all-important Martin Luther King, Jr. weekend we had most of the trails reopened and a record day on Sunday.

Already this season, we have experienced five roller-coaster weather events like this where we have seen warm-ups and rain followed by colder temperatures and some snow. There has always been a January thaw in Vermont. But five thaws by mid-January is not the norm. We are also experiencing higher velocity winds and greater storm intensity throughout the year.

What does this mean for our business and what do we have to do to be prepared for these increasingly volatile conditions?

For the past sixty years, we have had overhead power lines that brought power to our upper lifts and snowmaking motors. But with the high winds we have been experiencing, which are increasing in both frequency and severity, we realized how vulnerable our power lines were. So last summer, at a cost of over \$400,000, we buried them underground to prevent future damage from wind events. In the past, whenever we experienced high winds, I was always worried that a tree would fall on a GMP power line and black us out. That happened once when we had people in every chair on all sixteen lifts. This is not something we want to experience again.

Winter thaws create another risk that we need to mitigate. We are in the process of permitting a replacement snowmaking dam on the Mad River at a cost of \$1 million. The current dam is installed each November and removed in March. In

recent years, we have experienced more ice jams because of unusual warm-weather cycles. These ice jams have undermined the dam foundation and placed the entire dam in jeopardy. If it were to break in midwinter, we could be without snowmaking at a critical time. Therefore we are planning to replace it with an inflatable dam that can be deflated when an ice jam or high-water event occurs and reinflated after the danger passes.

When Irene devastated the state in the summer of 2011, many people were unaware that our snowmaking pond was washed out and filled with silt. Fortunately, we had just enough time and capital to replace it by the start of our snowmaking season. But had the storm occurred a few weeks later, we would not have been ready in time for our guests. Rebuilding the snowmaking pond was a \$1 million uninsured expense for us. We are now in the initial phase of planning a second snowmaking pond higher on the mountain as a precautionary measure that has the added benefit of expanding our snowmaking capacity in the future. From challenge comes opportunity.

I would like to speak a bit more about the importance of snowmaking to us and to the entire industry.

Fortunately, most of the Vermont ski areas are in better shape than almost anyone else in the country. We have invested in snowmaking for decades and have robust systems in place. But we are anticipating that what we are seeing in terms of weather volatility will intensify and that we will continue to see shorter windows of good snowmaking temperatures. Therefore, in order to adapt to this changing climate, we will need to make additional sizeable investments to increase our snowmaking capacity whenever we have favorable conditions. Not that we will be making more snow over the course of an entire season but that we will need to be prepared to make more snow whenever temperatures allow. At Sugarbush, we can produce around 6,500 gallons per minute (GPM) at full capacity. Currently we are developing a plan to increase that capacity to 8,000-9,000 GPM or more in order to remain competitive and sustainable as the climate changes.

Our ability to provide the conditions that our guests expect is dependent upon our ability to make these investments now, in a way that is sustainable in the long term. The ski resorts and mountains in Vermont are essential to our tourismbased economy. With less snow and fewer skiable weeks comes less revenue for local hotels and restaurants and shorter windows for seasonal employment. We must acknowledge these changes, develop a plan to mitigate their drivers through aggressive emissions reductions, and also recognize the need for investing in our adaptation and resilience as mandated by this legislation.

I hope that I have given you a better understanding of our business and of how climate change is already impacting us and the urgency to get in front of this crisis by taking strong action quickly. While I do not think that the ski industry will disappear in my lifetime, I want it sustained for my grandchildren and theirs. To achieve this, we cannot wait for slow policy and bureaucratic red tape. We must act now. In doing so, we can get ahead of the curve, save money, and create new economic opportunity. Delaying is never a good decision and hoping is never a reliable strategy.

I believe that our state needs a strong Climate Action Plan that provides a clear road map. We need to execute it well and hold ourselves accountable to that plan and to the requirements it lays out. That is how all good businesses operate. The government can learn from the private sector just as the private sector needs good government policy. I believe that H.688, the Vermont Global Warming Solutions Act, sets up the necessary framework for us to address this head-on.

I am sure that after hearing a lot of testimony there will be some modifications to the bill as it is written now, but it is a solid framework for discussion and I am supportive of it.

Although I am not representing the ski industry today, I would suggest that the ski industry be represented on the Climate Council or at least be considered as a key stakeholder at the planning table. We would bring good insight and the benefit of experience, and we have a vested interest in seeing significant climate action in Vermont.

While there is no silver bullet that can solve the problem of climate change, I believe that taking intermediary steps to mitigate the crisis is necessary, at least until we have developed sufficient battery storage capabilities to support a complete renewable energy economy.

Some of the steps I see as possible here in Vermont are:

- 1) Encouraging natural climate solutions such as protecting our forests from development and fragmentation, promoting reforestation, accelerating the restoration of degraded wetlands, and encouraging the development of healthier agricultural soils to capture and store carbon.
- 2) Significantly improving public transportation so that our current dependence on personal vehicles is reduced. This, by the way, is also important in our business in order to hire an adequate workforce that is able to get to and from their jobs reliably and cheaply.
- 3) Installing far more electric vehicle charging stations to promote electric vehicle ownership and reduce obstacles to the broad societal embrace of them that is needed (like "range anxiety" due to lack of sufficient charging stations).
- 4) Continuing to promote well-sited and appropriately scaled solar development while eliminating the cumulative net metering cap.
- 5) Encouraging energy efficiency and strategic electrification while reducing reliance on fossil fuels by expanding the ability of Efficiency Vermont to fund additional impactful projects.
- 6) Educating Vermont's many visitors about climate change, the impacts it is already having on our state, and what they can do personally. As an example, Sugarbush is hosting a climate panel on Saturday, February 22 to do just that.

We are a small state but I think that we have the will and the ability to be a leader in tackling climate change and H.688 is one of the critical right weapons for this fight.

Thank you again for the opportunity to share my perspective. I would be pleased to answer any questions.