



February 7, 2019

Senate Committee on Environment and Natural Resources:

Chair Senator Michael Dembrow

Vice-Chair Senator Alan Olsen

Member Senator Cliff Bentz

Member Senator Floyd Prozanski

Member Senator Arnie Roblan

Oregon State Legislature

900 Court St. NE

Salem, OR 97301

Subject: Support of Senate Bill 98

Dear Chair Dembrow, Vice-Chair Olsen, Member Bentz, Member Prozanski, and Member Roblan,

My name is Rita Hansen and I am the CEO of Onboard Dynamics. I am providing testimony today in support of Senate Bill 98.

We are based in Bend, Oregon and are OSU-Cascade's first company that was created and launched from technology originating at the university. As an energy startup, we represent the future and potential of Central Oregon. We have raised over \$8 million, the most coming from the Advanced Research Projects Agency – Energy, an agency within the Department of Energy. Over the past 5+ years, we have built a company that now has 10 full-time employees who are professionals, engineers, and highly skilled technicians based in our region.

We are leveraging today's traditional energy fuels and leading the transition to the next generation of energy fuels to not only power our truck transportation needs but also provide critical solutions for the renewable natural gas industry. We develop and deploy mobile natural gas compressors to provide fleets and other industry players an easy and cost-effective solution to compressing natural gas, thereby reducing fuel costs and NOx, particulate, and GHG emissions. Our technology can compress methane without electricity and at appropriate scale for smaller applications. Our solutions deliver positive economic outcomes, improvement to public health, and lasting environmental stewardship.

We see renewable natural gas as a critical component to achieving a low carbon future. Methane is naturally emitted from farms, water treatment plants, and landfills. Interestingly, and not understood by the general public, most atmospheric sources of methane, even in developed countries, do NOT come from the production and use of natural gas, but rather come from a variety of these natural sources, most of which are diffuse and hard to capture on an industrial scale.

The technology to collect, clean, and transport methane for fuel use is well developed, especially for the larger farms, treatment plants, and landfills. However, there are many sources, especially here in Oregon, that are smaller scale and therefore require a tailored approach, and for which our technology is well suited economically and technically. We are particularly focused on small to mid-size dairy farms in the range of 1,000 cows since renewable natural gas derived from these operations and used as a transportation fuel has the lowest lifecycle carbon intensity score compared to any other fuel source, including electric vehicles.¹ Here in Oregon, we have approximately 200 Grade A dairy operations and the majority meet the scale criteria we are targeting.

SB 98 would establish a market for a long-term buyer of the RNG from any RNG project, which could help us get projects launched and financed.

This bill is a win-win situation. It is good for the economy, especially here in Oregon, since it will spur activity in renewable natural gas projects which require clean-tech jobs. But, it is also good for the environment – a step towards a low carbon energy Oregon.

Thank you.

Very truly yours,



Rita Hansen

CEO

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¹ https://www.arb.ca.gov/fuels/lcfs/lcfs_meetings/041717discussionpaper_livestock.pdf

Qualifying manure-to-RNG fuel pathways under a Low Carbon Fuel Standard program could potentially earn Carbon Intensity (CI) scores ranging from -100 to -400 gCO₂e/MJ of bioCNG. These representative CI scores account for the net reduction in GHG emissions achieved by diversion of manure from open lagoons that previously vented methane to the atmosphere, which would occur in the absence of a digester project.