From: <u>Don Steinke</u>
To: <u>Jeffrey Delapena</u>

Subject: Questions raised by you at your May 1 Planning Commission meeting

Date: Friday, May 2, 2025 7:09:56 PM

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From Don Steinke – Climate CAG member To the Clark County Planning Commission, C/O Jeffrey Delapena

Re: Questions raised by you at your May 1 Planning Commission meeting

Dear Planning Commission,

Regarding a cost/benefit analysis:

When considering costs, keep these points in mind:

- 1. According to the EPA, for every \$1 spent reducing vehicle emissions, we save between \$10 and \$100 in health-care costs. We have no other choice. The law requires us to be net-zero by 2050. Our grid must be net zero by 2045. Net zero refers to a state where anthropogenic greenhouse gas emissions are balanced by their removal from the atmosphere (in the same year).
- 2. The prices for natural gas and gasoline are unpredictable. A war in Ukraine or tariffs on Canadian natural gas can change prices quickly. Most of our natural gas comes from northern Alberta Canada, 1000 miles away. The price of solar energy is fixed on the day the panels are installed.
- 3. The burning of natural gas in home furnaces and water heaters, causes NOx to pollute the neighborhood. When sunlight hits the NOx, visible smog is formed. What is the benefit of blue skies compared with smoggy skies?
- 4. Gas stoves in poorly-vented homes exacerbate asthma. What are the resulting costs of hospital visits and lost days at work?
- 5. Include the cost of climate change. The January wildfires in the Pacific Palisades were exacerbated by global warming.
- 6. The prices for clean energy technologies have fallen steadily and predictably. They will continue to fall. People learn by doing. My 2023 Chevy Bolt cost \$28,000 which was \$10,000 less than its

original cost in 2017. That's because the price of batteries has fallen. The price of solar falls 20% every time the installed global capacity is doubled.

Regarding the challenge of changing behaviors in terms of vehicle miles traveled.

Right now, young people have no choice but to drive a lot. Young people cannot afford to live in the communities they grew up in because our detached single family zoning laws prohibit middle housing. In addition, architects need the freedom to create appealing multifamily developments.

As an example, a new nurse at a medical clinic in Camas could not find affordable housing nearby and had to get something in Woodland. Now she spends about \$300 per month driving to work.

We need housing near employment centers and amenities so that people need to drive less.

Regarding the time needed driving a Tesla to compensate for the extra CO2 emitted in its manufacture.

According to Google AI

It typically takes between 1 to 2 years of driving to compensate for the extra emissions associated with a Tesla's manufacturing compared to a gasoline-powered car. This break-even point is influenced by factors like driving distance and the cleanliness of the power grid. While the initial production of an EV has a higher carbon footprint, the lower emissions during operation quickly outweigh this in the long run.

But if the same Tesla Model 3 was being driven in Norway, which generates almost all its electricity from renewable hydropower, the break-even point would come after just 9,000 miles.

Don Steinke