Jeffry Berner

Refer to the attached document which recommends text to incorporate the AVID framework (Prof. John Sterman, MIT Sloan School, director Climate Pathways Project).

The following changes are requested to the Draft Chapter 173-446B WAC.

In 173-446B-010 Introduction, the following text is to be appended to paragraph (3):

- (d) The year that the project's greenhouse gas reductions begins and the time frame over which greenhouse gas reductions occur.
- (e) An explanation of how receipt of funds provides additional greenhouse gas emissions reductions that might otherwise not occur.
- (f) An assessment of additional economic, ecological, health or other benefits provided by the project.
- (g) An assessment of the durability or permanence of greenhouse gas emission reductions.

In 173-446B-060 What information are recipients required to provide to Ecology?, the following text is to be appended to paragraph (1)(k):

- (iii) If so, what is the year that the greenhouse gas emissions (carbon dioxide equivalent) begin and the time frame over which the reduction occurs for the expenditure?
- (iv) If so, how does the expenditure provide a reduction in greenhouse gas emissions (carbon dioxide equivalent) that would not occur had the expenditure not been made?
- (v) If so, what other measurable economic, ecological or health benefits are provided by the expenditure?
- (vi) If so, how long-lasting and what are the risks for greenhouse gas emission (carbon dioxide equivalent) reduction for the expenditure?

These recommendations are made to align the reporting rule to the **AVID+** framework as proposed by Dr. John Sterman, director of MIT Sloan School of Management Climate Pathways Project. The Climate Pathways Project uses economy wide modeling and simulation to guide top-level decision makers in government, business, and civil society in advancing the adoption of evidence-based climate policies. The **AVID+** framework therefore stipulates the necessary conditions in such modeling and simulation for effective policy action to reduce greenhouse gas emissions with a degree of certainty.

The AVID+ framework is intended to direct policy for both the application of carbon offsets and carbon reduction investments. The **AVID+** framework is as follows¹:

• Additional: Projects must reduce emissions that would not otherwise be cut. Funding renewable energy projects that are profitable today is not additional because, being profitable, they will be built anyway. Helping charities buy electric vehicles may not be additional if their trade-ins depress used car prices, making old gas-guzzlers more affordable, thus cutting electric vehicle sales. Protecting a tract of forest is not additional if loggers simply cut nearby, unprotected trees.

¹ The AVID+ framework is lightly edited text from John Sterman opinion "Opinion: 'Net zero' pledges can amount to greenwashing. This is the better way to reduce deadly carbon emissions" Marketwatch.com, Jan. 19, 2022; https://www.marketwatch.com/story/net-zero-pledges-can-amount-to-greenwashing-this-is-the-better-way-to-reduce-deadly-carbon-emissions-11642609889

- **Verifiable:** Can you verify and quantify that emissions actually fell? If you plant trees, you must verify that they survive. If you are capturing and storing carbon from power plants, you must quantify and verify that it remains underground. Monitoring is costly, but necessary.
- Immediate: Just as saving a dollar today is worth more than saving a dollar in 2050 because of the interest you earn, emissions cut today are worth more than the same cuts in 2050. An airplane flight dumps carbon dioxide into the atmosphere right now, worsening warming from this day forth. Saplings planted today won't grow enough to offset today's emissions for decades, nor will investments in uncertain future technologies such as nuclear fusion or direct-air capture, even if they eventually become viable.
- **Durable:** Carbon dioxide emissions stay in the atmosphere for a century or more. A project must reduce an equivalent amount of emissions for at least that long. Some carbon dioxide pumped underground could escape. Trees planted today may be poached or harvested, or succumb to wildfire, disease, drought, or extreme weather all made more likely by climate change.
- + (Plus): Finally, projects should multisolve. They should advance other worthy goals in addition to their climate benefits, such as job creation, poverty reduction, or improved health.

Expenditures for greenhouse gas emission reduction projects will vary in their effectiveness. Danny Cullenward and Victor David in their critique of the California cap-and-trade system in their book "Making Climate Policy Work" provide the figure below which shows the wide variation in cost-effectiveness (carbon price) of California's carbon reduction projects.

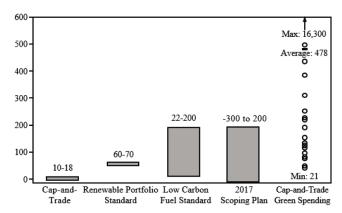


Figure 4.4 California climate policies and their equivalent carbon prices (USD per tCO₂-equivalent)

The proposed Washington rule will be equivalent to that of California, and will currently as such not provide context for why projects with lower effectiveness were selected for funding.

Consequently, appropriations judged exclusively on cost-effectiveness will not provide sufficient information to Washington's policy makers as to other important project characteristics which the AVID+ framework provides.

Namely,

Is the expenditure really needed or would it happen without government help?

What other benefits may a greenhouse gas reduction project bring to a community?

When will reductions occur and the co-benefits be seen in communities?

Does the project have staying power or will reductions need to be done over again?

Section **173-446B-070** of the draft rule specifies using the "appropriate California Air Resources Board methodology and calculator tool for use in calculating emissions reductions,...". The CARB methodology would be sufficient for both the **Verifiable** and **+(Plus)** components of the **AVID+** framework as the CARB methodology specifically dictates equations for greenhouse gas emission reductions and any additional numerical co-benefits. However, it is recommended that the co-benefits be specifically mentioned in the rule rather than through inference to the CARB methodology alone.

The **Additional**, **Immediate**, and **Durable** components of the **AVID+** framework would not be addressed by reference to the CARB methodology though. In this case, the rule needs to expressly callout reporting requirements for these elements of the framework as recommended by the proposals above.

Jeff Berner

46th Legislative District

Washington State Democrats Environment & Climate Change – Executive Committee member
5631 20th Ave NE

Seattle WA 98105

jkberner@comcast.net