

Comment 1 for Carbon Neutrality: Social Cost of Carbon and Affordability (cn-social-cost-ws) - 1st Workshop.

First Name: G

Last Name: Naugles

Email Address: G@Balance2thrive.com

Affiliation: Balance2thrive(R), Stanford, CSUCI

Subject: Discount Rate

Comment:

Thank you CalEPA and panelists for making this discussion public.

The topic of Discount Rate is interesting in terms of short and long term effects as they influence present value decision making. The parallels between monetary policy and climate change impact mitigation investments as they relate to business and consumer decision making are interesting. Relationships between discount rate, the federal funds rate, and inflation are important. I believe reasonable discount rates are a function of the federal funds rate and inflation is a function of money supply, which is in turn a function of the federal funds rate and multiplier effects that occur with borrowing now to pay debt in the future. Current US Presidential Administration policies and Fed policies seem dedicated to driving down the federal funds rate to stimulate the US economy. This also would seem to increase the supply of dollars and drive the value of the dollar downward, which is recognized as generally positive for manufacturers who export from the US to other parts of the world. The other countries have followed suit, devaluing their own currency in lock step with the United States. How this affects decisions regarding investment in renewables and the Social Cost of Carbon is interesting.

A) On one hand the low federal funds rate and the consequent lowering of mortgage rates and other lending rates would seem to increase incentives to spend now in order to decrease carbon emissions. Furthermore:

- 1) models mentioned today suggest that decreasing carbon emissions in the present is more valuable from a common good point of view than the same actions in the future,
- 2) higher income businesses and households are still enjoying a peak of prosperity, making it easier to invest in decarbonized energy technologies,
- 3)

These concepts suggest spending now to decarbonize may present significant gains.

On the other hand we have a presumption of a 7% discount rate, not supported by any academics according to Anthoff, which motivates businesses and consumers to wait. Further incentives to wait include:

- 1) the relatively lower cost of future decarbonization investments related to technology advancement,
- 2) opportunity costs while the economy is enjoying a prolonged recovery before its next recession which is now years over-due,
- 3) yesterday's session mentioned the residence time in our

atmosphere of CO2 and other GHG's emitted today is thousands of years, and
4)many decarbonized energy technologies have significant embodied fossil fuel energy impacts including but not limited to carbon footprint or GHG footprint and marketers frequently underestimate and publish unrealistic payback periods.

Can we please get our rates straight? Unfortunately, I have to admit that a 7% discount rate might make sense in a 7% average inflation scenario . . . which may very well be what we are building towards under current administration pressure on the FED to keep cutting the federal funds rate.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2019-08-16 12:34:57

No Duplicates.

Comment 2 for Carbon Neutrality: Social Cost of Carbon and Affordability (cn-social-cost-ws) - 1st Workshop.

First Name: Laura

Last Name: Rosenberger Haider

Email Address: lauragreen.rosenberger@gmail.com

Affiliation: Fresnans Against Fracking

Subject: Societal Cost of carbon

Comment:

Take into account the concentration of toxic heavy metals in irrigation water harming crops and getting into drinking water and competing with vital minerals for absorption by our bodies. Metals that are brought out by oil industry chemicals: radium, mercury, lead, copper, nickel, hexavalent chromium, excessive barium and VOCs. These are linked to several diseases including Autism, Alzheimer's, autoimmune, Parkinson's, Thyroid Disease, organ failure or developmental disorders which disable productivity and sometimes cause accidents. Storms create & move chemical dust & spills. Then, it dries & concentrates in summer in the sloughs & lakes.

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Original File Name:

Date and Time Comment Was Submitted: 2019-08-16 13:55:28

No Duplicates.

**Comment 3 for Carbon Neutrality: Social Cost of Carbon and Affordability
(cn-social-cost-ws) - 1st Workshop.**

First Name: G
Last Name: Naugles
Email Address: G@Balance2thrive.com
Affiliation:

Subject: With all due respect, simplify your message please.

Comment:

Can you please decrease the emphasis on uncertainty and tell us more about what you would do if you had to distill it all down and make a decision? Analysis paralysis related to uncertainty makes populist leaders' opportunity to feed their own selfish enterprise.

If you need money for research then just say how much and get specific about how much uncertainty can be eliminated per million dollar spent.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2019-08-16 14:03:34

No Duplicates.

**Comment 4 for Carbon Neutrality: Social Cost of Carbon and Affordability
(cn-social-cost-ws) - 1st Workshop.**

First Name: G
Last Name: Naugles
Email Address: G@Balance2thrive.com
Affiliation:

Subject: Ask Panelists how they would decrease their emissions for \$15/ton
Comment:

Can you please ask the panelists how they would decrease their own personal emissions for \$15/ton or if they can't do it for that, then what do they think is the break-even price per ton they can access as individuals and how lower income people paying 5% to 15% for financing can decrease carbon emissions at a \$15/ton price for carbon?

My key point is that the cap and trade price is far from the actual cost of carbon emissions with is much greater than \$15/ton.

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Original File Name:

Date and Time Comment Was Submitted: 2019-08-16 14:41:58

No Duplicates.

Comment 5 for Carbon Neutrality: Social Cost of Carbon and Affordability (cn-social-cost-ws) - 1st Workshop.

First Name: G
Last Name: Naugles
Email Address: G@Balance2thrive.com
Affiliation:

Subject: Gas Tax from Wilson, Gray Davis, Enron, caution
Comment:

Thank you for your efforts panelists and CalEPA.
Observations:

A)I appreciate Majinder as a facilitator, however earlier sessions included ethnically diverse female panelists who contributed very important input...where are the female panelists in this last 3 person panel, plus facilitator Majinder, regarding cap and trade prices?

Women arguably have more experience with purses (smile) and by extension may have unique and important perspectives about pricing and effects on children and families, can you please include more ethnic and gender diversity in future discussions?

B)My great great grand children won't let me sleep...Greenland is melting, arctic salmon are dying from heat stress in 70 degree river water future impacts are likely to exceed what we have seen already.

<https://www.co2.earth/> claims it is 410.8 ppm now,

<https://www.climate.gov/news-features/understanding-climate/climate-change-atmospheric-carbon-dioxide> claims it was 405 ppm in 2018.

Both those numbers are higher than the 350ppm of my youth, emphasizing the fact that we have more power to reduce pollution at our individual tailpipes and smoke-stacks than we are empowered to decrease background CO2 levels in our air.

Cap and trade needs to address Environmental Justice aspects of transportation emissions and industrial/commercial point source emissions of particulate and other emissions.

C)When you consider incentives, taxation, and pricing please remember California's vulnerabilities that became evident under GOP President Bush and democratic Governor Gray Davis: Bush-funder Enron gamed our natural gas and electricity delivery systems with initiatives like DeathStar and others which caused brown outs and stole billions of dollars from Californians. Then the imposition of a gas tax approved under Pete Wilson dealt a fatal blow to Gray Davis' administration and before we knew it we had a referendum election that put a GOP actor named Ahnold in office. Conclusion: incentives may be more politically viable than increasing cap and trade pricing and increased taxes at the gas pump. That said, I

still think the price floor on carbon needs to better reflect the real, ecological and social cost of carbon. I also think CalEPA needs to do a better job of including the Biodiversity cost of carbon emissions in that price floor, as well as in the way California's state government distributes the proceeds from the carbon emission allocation auctions.

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Original File Name:

Date and Time Comment Was Submitted: 2019-08-16 15:05:43

No Duplicates.

Comment 6 for Carbon Neutrality: Social Cost of Carbon and Affordability (cn-social-cost-ws) - 1st Workshop.

First Name: G

Last Name: Naugles

Email Address: G@Balance2thrive.com

Affiliation:

Subject: Major auto manufacturers increasing SUV Production

Comment:

Can our State Government do more to help car manufacturers manufacture cost-competitive electric vans/SUV's/cars to compete with Volkswagen, Ford, etc.? We are still seeing individual people commute with more and more new, multi-ton vehicles from home to work every day, paid for with tax credits to the rich. Automakers have responded to lowered emissions and mpg standards at the federal level with profit-maximizing moves to make more SUV's and close plants that make cars with higher mpg ratings and/or electric power trains.

Would California be willing to provided financing to electric commute cooperatives and cohousing projects capable of dramatically decreasing per capita carbon footprint related to transportation, office space, and industry? Can you please consider the example of Denmark and how it provided low-rate loans to housing cooperatives that built cohousing to achieve higher quality of life with lower per capita cost and lower per capita energy use?

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Original File Name:

Date and Time Comment Was Submitted: 2019-08-16 16:37:38

No Duplicates.

Comment 7 for Carbon Neutrality: Social Cost of Carbon and Affordability (cn-social-cost-ws) - 1st Workshop.

First Name: G
Last Name: Naugles
Email Address: G@Balance2thrive.com
Affiliation:

Subject: Steak vs. ton of CO2 pricing model
Comment:

The Cap and Trade Pricing Model is too complicated!

Just set \$/ton of carbon dioxide equivalent
equal to
the average \$/steak in Sacramento restaurants near the capital.

The Diplomat Steak House serves steak for \$45 and up tonight.

Why not charge the same price for a ton of CO2 emissions?

Is that a sacred cow on your plate, or are you just happy to C me?

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2019-08-16 19:42:05

No Duplicates.

Comment 8 for Carbon Neutrality: Social Cost of Carbon and Affordability (cn-social-cost-ws) - 1st Workshop.

First Name: Laura

Last Name: Rosenberger Haider

Email Address: lauragreen.rosenberger@gmail.com

Affiliation: Fresnans Against Fracking

Subject: Social Cost of Carbon

Comment:

The storms of climate change can move spilled or leaked chemicals & toxic metals from industrial areas to residential or agricultural areas. These concentrate in sloughs, ponds, and streams in the drying heat of summer, then could contaminate drinking water. Oil extraction fluids can bring out radium (as happened in the Lost Hills/South Belridge area, discovered by Dr Pete McMahon last year), uranium, mercury, lead, nickel, hexavalent chromium, excessive barium (linked to heart disease). These are linked to allergies, autoimmune diseases, developmental defects, autism, Alzheimer's, Parkinson's, thyroid disease (something from the Lost Hills Oilfield contributed to thyroid disease), diabetes, or organ failure. Some of these metals bioaccumulate. These diseases are linked to lost productivity and accidents.

The heat of climate change is linked to toxic algae blooms in water that can poison animals and children and be allergenic in lower concentrations.

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2019-08-17 07:58:58

No Duplicates.

**Comment 9 for Carbon Neutrality: Social Cost of Carbon and Affordability
(cn-social-cost-ws) - 1st Workshop.**

First Name: Chris
Last Name: Busch
Email Address: chrisb@energyinnovation.org
Affiliation: Energy Innovation

Subject: Workshop comments
Comment:

Please see that attached letter for our comments.

Thanks for your work on behalf of the people of California and future generations, whose well-being largely depends on our efforts today to manage greenhouse gas emissions.

Attachment: www.arb.ca.gov/lists/com-attach/10-cn-social-cost-ws-UDVUPANnBSRWN1Ir.pdf

Original File Name: Energy Innovation (28 August 2019).pdf

Date and Time Comment Was Submitted: 2019-08-28 09:40:49

No Duplicates.

Comment 10 for Carbon Neutrality: Social Cost of Carbon and Affordability (cn-social-cost-ws) - 1st Workshop.

First Name: Gary
Last Name: Hughes
Email Address: garyhughes.bfw@gmail.com
Affiliation: Biofuelwatch

Subject: Concept of Carbon Neutrality Is Based on Flawed Science
Comment:

To whom it may concern at the ARB:

I attended the workshop on Carbon Neutrality and the Social Cost of Carbon.

This was a disturbing event due to the demonstration of a failure to understand the basic fundamentals of climate science.

One of the most simple elements of climate science is that emissions are cumulative.

Climate change is happening because of the increasing concentration of GHG in the atmosphere. This is occurring because of the sum of our emissions from yesterday, plus the emissions from today, plus the emissions from tomorrow. Why does the ARB perpetually deny this basic fact of climate science?

The concept of "carbon neutrality" is largely a fiction that has been constructed for economic and political reasons to protect polluting industry and the financial interests that profit from their activities. The concept of "carbon neutrality" is devoid of scientific understandings of how it is that humans are disturbing global carbon cycles.

The other element that was very disturbing in this workshop is the way that geoengineering is being normalized, and that such fossil fuel industry technological adaptations are not being named for what they are: geoengineering.

Carbon Capture and Sequestration and Direct Air Capture are both geoengineering technologies that do nothing to address climate change because they are intended to allow the fossil fuel industry to continue with business as usual.

A case in point was the actual description by one panelist of "decarbonized fossil energy."

This is a fallacy. There is no such thing. The entire concept of "decarbonized fossil energy" is an invention of the fossil fuel industry. Why is the ARB once again protecting polluting industry under the guise of the development of climate policy?

One of the great failures of the ARB is the perpetuation of the myth that ongoing fossil fuel use is compatible with climate action. History will not be kind with the ARB, the future

generations will look at the failure of the ARB to integrate fundamental science into policy development and will ask "what were they doing protecting polluters with such bad science?"

The one redeeming factor in this workshop was the presence of an EJ voice on the panel who stated the most important truth of the entire workshop:

"While it is the most vulnerable communities that are most exposed to the harms of climate change, it is these very same vulnerable communities that are most exposed to the harms embedded in much of the climate policy that the ARB is promoting."

The time has long passed for the ARB to abandon economic ideology as the prevailing compass for the development of policy and to begin to put climate science front and center.

Our organization remains available to participate as a panelist in future workshops on "carbon neutrality." We have expertise and knowledge to share.

Thank you for your attention to this message.

Gary Hughes

Attachment:

Original File Name:

Date and Time Comment Was Submitted: 2019-08-30 10:57:09

No Duplicates.

There are no comments posted to Carbon Neutrality: Social Cost of Carbon and Affordability (cn-social-cost-ws) that were presented during the Workshop at this time.