Sightline Institute
1402 Third Avenue, Suite 500
Seattle, Washington 98101
www.sightline.org

August 13, 2008

Comments on The Western Climate Initiative's
Draft Design of the Regional Cap-and-Trade Program

Comments prepared by:
Eric de Place, senior researcher, eric@sightline.org

1. SCOPE

1.2.4. **Natural gas used in residential and commercial facilities should be included in the *first* compliance period.** It is difficult to understand why the inclusion of natural gas would be delayed. There are no significant measurement difficulties and there are myriad opportunities for end-use efficiency in this sector. Moreover, delay will tend to incent fuel-switching from priced-carbon to un-priced-carbon.

1.2.5. **Transportation fuels should be included in the *first* compliance period.** In our view, *one of the biggest problems with the July draft design is that WCI is delaying inclusion of transportation fuels* -- the largest share of emissions in the region -- until the second compliance period. Seven years is simply too long to wait to adequately address the central climate threat of the West. There are no major technical barriers to including the transportation sector. (Certainly the barriers are less significant than those pertaining to First Jurisdictional Delivery in the electricity sector.) We are additionally concerned that because each compliance period is three years long, we might not see meaningful reductions in transportation emissions until eight or nine years from now.

1.2.6. Whether or not transportation fuels are delayed until the second compliance period, **we encourage WCI partners to act expeditiously to adopt complementary policies that will reduce demand for transportation carbon.** In particular, we recommend strategies to increase vehicle fuel efficiency and occupancy and to reduce vehicle miles traveled.

1.3 Biofuels and biomass. **At minimum, this section demands elaboration and clarification.** On one reading of WCI's statement, gasoline blended with corn ethanol and diesel blended with soybean biodiesel will be entirely off the hook. Presumably, it's just that the *biological* components of those fuels will be ignored, but WCI should say so clearly.

It's sometimes asserted that biomass can be ignored because it's part of the carbon cycle and can be replaced by future biological growth. That may be true in a some specific instances, but it's an insufficiently nuanced approach to a very complex subject. It ignores the fact that some forms of biomass extraction -- say, clearing an old growth forest -- release so much carbon that it would take decades, even centuries, to replace the carbon on-site. It also ignores the indirect but very real effects that land use choices have on global fuel demand, as well as on demand for additional land conversion. It can be very difficult to accurately account for these factors, but that doesn't make them unimportant.

One possible solution is to **treat biomass the same as other sources of carbon,** at least when biomass is combusted for energy. The greenhouse gas emissions of biomass should be tallied, or at least estimated, and polluters should be required to obtain carbon allowances in proportion to their emissions. Admittedly, this solution would *not* account for the complex supply-chain issues mentioned above (dealing with those would probably require a full life-cycle analysis). Nevertheless, counting the direct carbon emissions from biomass combustion would tilt the playing field back to something approaching level.

Unfortunately, under the current proposal WCI will only count -- and price -- the emissions from fossil fuels and not the emissions from biomass, even though the carbon each releases has *exactly the same effect on the atmosphere*. (The carbon benefits of biological growth and terrestrial sequestration should be accounted for separately.) Ignoring the carbon from biomass will mean that some carbon emissions will carry a price, but other emissions will be free and will therefore not reflect their damage to the climate. Naturally, of course, consumers in WCI will gravitate to unpriced sources of carbon without regard for their harm. This is worrisome because there is good evidence that at least some biofuels are harmful to the climate, perhaps extremely harmful.

1.4 We are concerned with WCI's current language around allowing jurisdictions to use "comparable fiscal measures" such as British Columbia's carbon tax. Please see our comments below on Section 5.

2. POINT OF REGULATION

2.4 We encourage **regulation of transportation fuels at the terminal rack**, which we believe is consistent with U.S. federal taxation, as well as the taxation protocols in many (but not all) of the WCI states. Some additional accounting method will be required to net out jurisdictional imports and exports, but these methods should be vastly simpler than those required for the electricity sector. Some additional methodology may need to be developed for those petroleum streams that do not pass through terminal racks, as in the case of some quantities of aviation fuel.

3. THRESHOLD

3.1 At minimum, **the proposed threshold bears further justification.** Setting a threshold is a balancing act between comprehensiveness and administrative simplicity. If 25,000 tons is an appropriate balance, WCI should supply some supporting evidence. In the absence of such evidence, we believe that the threshold for regulation should be set at no greater than 10,000 tons.

We are particularly concerned about comprehensiveness in Canada, as well as in other places with large energy extraction industries. Our understanding is that the emissions from drills, wellheads, processors, refiners, and related equipment can be fragmented and dispersed such that on an individual level they fall below the threshold. The Pembina Institute has conducted some helpful analysis of the issue. In Pembina's earlier comments to WCI on reporting they pointed out: "In the upstream oil and gas sector, characterized by very large numbers of very small facilities, coverage of an adequate proportion of total emissions will require either (i) that the reporting threshold be set much lower than 10,000 tonnes CO2e per year per stationary source; or (ii) that a "source" for reporting purposes be defined to amalgamate many smaller neighboring facilities that may be part of a connected system. **According to Environment Canada, a combined threshold of 1,000 tonnes CO2e per facility... would result in coverage of only 80% of the Canadian upstream oil and gas sector's emissions.** We regard this as insufficient coverage."

Importantly, these upstream oil and gas emissions are a big deal in British Columbia's portfolio of emissions. As much as 1 ton in every 4 or 5 tons of BC's total emissions are from fossil fuel production and processing, so even a 1,000 ton threshold might still exclude 5 percent of the province's total emissions. A 10,000 ton threshold might still easily exclude 10 percent or more of BC's emissions. It is unclear how much a 25,000 ton threshold would exclude, but it's likely a large fraction. At minimum, WCI should provide a good estimate before charting a course that leaves a significant hole in the coverage of BC's climate pollution. New Mexico is perhaps similarly situated. An even greater share of New Mexico's carbon emissions come from the production and processing of oil and gas.

5. ROLE OF OTHER POLICIES

5.1 Complementary policies are important, but it is equally important to recognize that they can never substitute for a firm, enforceable, and declining cap on carbon. If any sectors are delayed from inclusion under the cap -- such as transportation fuels or residential and commercial natural gas -- then it will be especially important for WCI to adopt meaningful carbon-reduction strategies for these sectors in advance of their inclusion. For the transportation sector these policies

should include: 1) boosting vehicle efficiency and occupancy; 2) decreasing vehicle miles traveled; and 3) beginning to develop a protocol for measuring the carbon-intensity of fuels.

5.2.1 Other fiscal measures may be appropriate complementary approaches, but carbon taxes should *not* substitute for an economy-wide cap on carbon.

5.2.2 WCI should evaluate the prospect of integrating British Columbia's carbon tax by creating a "reserve price" (a price floor) in WCI's cap and trade program. This would create at least two benefits: 1) it would reduce the volatility of permit prices; and 2) it would incent reductions at a faster rate than the cap's reduction schedule.

6. SETTING THE REGIONAL CAP

We found the language in Section 6 to be extremely confusing. We would appreciate a clearer description, perhaps aided by some graphic representation.

6.2 Either 1) the cap and trade program should start earlier than 2012, or else 2) the initial cap should be set lower than 100 percent of expected emissions. Setting the initial cap at 100 percent of expected emissions will mean that the path of reductions will need to be steep, achieving WCI's entire goal in just a few years. Delaying the start-date until 2012 also potentially causes problems. Even if emissions only average a growth rate of 1 percent per year -- and they could easily grow more -- then they will be 7 percent higher in 2012 than they were in 2005. To get to a 15 percent reduction, therefore, we'd need a total of a 22 percent reduction. And we'd need it in the span of just a few years, mostly between 2015 and 2020.

An emissions reduction of more than 20 percent in a few years is worrisome. A sudden 20-percent reduction will likely create political difficulties, perhaps jeopardizing the program. Beginning around 2015, it's reasonable to expect a strong backlash as polluters approach the crunch time and must reduce emissions by as much as 4 percent per year. Starting sooner will make the whole process much easier.

Despite assurances to the contrary, for a few industries there may also be a built-in incentive to *increase* pollution in the short term. A smelter, for instance, might choose to ramp up production before 2012, accumulating a stockpile of product so that it can ease off production once the first compliance period starts.

Delaying the cap raises a gigantic red flag: **it is paramount that any free allowances are NOT awarded based on emissions reported between 2008 and the start of the first compliance period.** Awarding allowances on that basis could create a strong incentive to pollute more in the near term in order to obtain

more credits later. WCI's recent draft should clarify this extremely important issue.

A better way to start the WCI would be to begin the program in, say, 2010 and auction all of the permits. Even if the cap were set at 100 percent (or more) of expected emissions, full auctioning would serve a variety of important functions. It would generate good reporting data while avoiding perverse incentives to ramp up pollution; it would allow businesses to get accustomed to an auction in a low-stakes environment where the supply of pollution permits is at least equal to demand; and it would allow for an easier "glide path" for reducing emissions. With full auctioning, there's much less need to set a baseline of emissions in advance.

6.3 **If any major sources of emissions are delayed until the second compliance period, the cap should be set to include less than 100% of their expected emissions.** These sources of emissions would have the benefit of five years of reporting data. Setting their initial cap below 100% of their emissions will both encourage early action and minimize the steepness of the reductions required to meet WCI's targets.

7. APPORTIONMENT

State and provincial allowance budgets should be set, at least in part, so that allowance value can be used to cushion low-income individuals from the regressive effects of higher energy prices.

8. DISTRIBUTION OF ALLOWANCES

All WCI allowances should be distributed through a public auction. Compared with free allocation, auctions would enhance economic efficiency, treat all firms evenhandedly, and help ensure that the public retains the full economic value of emissions allowances.

8.2 We are concerned that rate-regulated and/or consumer-owned utilities may be eligible for free allowances in WCI. While there is some evidence that many of these utilities will not reap windfall profits by passing on opportunity costs to consumers, there are a number of good reasons to avoid free allocation in the electricity sector.

In fact, **handing out permits to utilities for free has the potential to backfire**, raising the overall cost of emissions reductions -- thereby increasing the cost that consumers pay for all of their other energy needs. There are four reasons that "protecting" electricity consumers from rate increases would likely backfire.

1. **Lower power prices discourage efficiency.** If electricity stays cheap -- and, in particular, if electricity prices don't reflect the true cost of emissions -- fewer people will upgrade their old fridges, unplug the extra freezers in the garage, or install super-efficient ground-source heat pumps. (If power's cheap, why not just stick with the old fridge?) More generally, cheap electricity means that it takes longer for any efficiency upgrade to pay for itself – which undermines the incentive for paying for the upgrade in the first place. As a result, keeping electricity prices low could *undermine incentives for households and businesses to trim their consumption* – which is often among the cheapest ways to reduce emissions.

2. **Inconsistent prices encourage climate-disrupting fuel choices.** If electricity rates remain low, but natural gas and fuel oil prices have a "carbon price" attached to them -- as they will under a comprehensive cap-and-trade system -- then electric power prices will look enticing. Some consumers will likely switch from, say, gas heat to electric heat; others will choose to stick with their electric heat rather than switch to gas. From the consumer's perspective, this makes sense: they're choosing a cheaper fuel option. But from the climate's perspective, electric resistance heat is a bad deal. As long as the western power grid gets its marginal electric power from natural gas and coal, switching to electric resistance heat is a far worse choice for the climate than heating directly with natural gas.

In the same way, if gas prices rise but electricity stays cheap, we could see big boosts in electric cars or plug-in hybrids. If the electricity comes from renewable sources that would be a good thing. But if it's from coal-fired plants, it could be worse for the climate than plain-old gasoline. So in general, until we squeeze most of the fossil power out of the electricity grid, switching away from *direct* fossil fuel use, and towards electricity, can increase climate-disrupting emissions.

3. **Once a cap is in place, lower electricity prices might *increase* total household spending on energy.** Electricity is a great place to find cheap emissions reductions. There are already low-carbon alternatives to coal-fired power -- especially new wind and solar -- and the Northwest Power and Conservation Council, among others, has already identified scores of low-cost ways to reduce end-use consumption. However, if low power prices boost consumption (see points 1 and 2 above) then it gets harder to satisfy demand with efficiency and new renewables alone. A boost in power demand could give old, dirty coal-fired power plants a stay of execution -- with a much slower phase-out of coal from the West's generation mix.

If coal-fired power plants remain active for longer, the emissions cap will force steeper reductions in transportation and industrial emissions. Those kinds of reductions could easily cost more per ton than reductions in coal power -- and those higher costs will translate into higher market prices for carbon permits. Higher permit costs, in turn, will get passed through to households as higher

prices for gas, diesel, heating oil, natural gas, manufactured products, food, you name it.

So in the end, free permits to electricity could mean that consumers face *lower* prices for electricity, but far *higher* costs for all other fossil energy. And on balance, since electricity represents a relatively small share of household emissions -- particularly in the hydro-rich Northwest -- the modest savings on power could be overwhelmed by higher permit costs in other sectors. The whole point of a cap-and-trade system is to find the cheapest emissions reductions, wherever they may be. By diluting the price signal in electricity, we may wind up creating higher permit costs in other sectors – costs that, in the aggregate, loom larger in family budgets.

4. **Granting free permits to one part of the energy industry—utilities—makes it far more likely that we'll grant free permits to other parts as well.** If electric utilities are granted free permits, it'll be a lot harder to say "no" to the natural gas utilities, the propane distributors, the big industrial emitters, the pipeline companies, and ultimately even big oil -- the industries that really can extract windfall profits from their customers.

Awarding free allowances to electric utilities is *not* standing up for utility customers. Utility customers don't just buy electricity. They also drive, heat their homes, and pay for food and manufactured goods. The way to serve them is not to keep electricity prices low, it's to keep *carbon* prices low. That means utilities should buy their permits at auction, just like everyone else.

8.3 As worded, this subsection raises very serious concerns. Partners should *not* be able to award the remaining allowances as they see fit. Specifically, **it is paramount that any free allowances are NOT awarded based on emissions reported between 2008 and the start of the first compliance period.** Awarding allowances on that basis could create a strong monetary incentive to pollute more in the near term in order to obtain valuable allowances. WCI should clarify this extremely important issue.

8.7 **The minimum auction percentage should be as high as possible** because of the substantial benefits that accompany auctioning. Setting a high minimum will also promote consistency between WCI jurisdictions, which will ameliorate the potential for competitive disadvantages between WCI firms. And a high minimum in the initial stages of WCI will make it easier to more quickly transition to full auctioning, a goal that WCI has stated in some communications.

8.9 **Awarding credit for early action is easiest and fairest under full auctioning:** firms that have taken early action benefit because they do not have to bid for allowances.

9. OFFSETS

9.2 **WCI should initially allow capped firms to include in their annual portfolio of carbon allowances no more than 1% offsets.** Since WCI is aiming for a 15% reduction, that would mean offsets could comprise about 6.7% of the program's reductions.

9.3 WCI should only allow offsets from emission sources that will probably never be amenable to capping directly, even after several years of effort. For example, methane leaks from landfills, manure piles and sewage lagoons are too difficult to monitor for capping in the next few years. But because they are site-specific emissions sources, we might be able to cap them with some targeted investments in innovative monitoring technology. In contrast, carbon storage in forests and other extensive ecosystems may not be suitable for ongoing greenhouse gas monitoring. Thus, forest projects are probably better candidates for offsets than methane leaks.

9.4 WCI should consider delaying the offset program until later. Offsets may not confer much cost advantage over simply reducing emissions or purchasing allowances. In the European carbon market, offset prices for CDM CERs are relatively high ($27/ton at the time of writing) despite the fact that the offset program has been notoriously lax. Strengthening the integrity of the offset program to a level acceptable for WCI would presumably reduce the supply of available offsets, hence raising their price. An genuinely rigorous offset program might throw a complicating wrench into the works of cap and trade without offering a meaningful cost-savings opportunity.

9.5 Offsets may harm WCI's ability to expand either in scope or in geography. Paying certain landowners and industries to limit (or sequester) emissions through offsets sets a bad precedent: it will make politically difficult the later task of capping their emissions as a matter of law. It will seem unfair to those who are paying substantially for the permission to pollute. Similarly, potential new partner jurisdictions may be discouraged from joining WCI because some of their industries would be transitioning from receiving money (as payment for offsets) to spending money (to obtain allowances).

WCI should only recognize offsets that originate within that system's political boundaries, at least in the early years. This strategy would ensure that the positive side-effects of emissions reductions, such as the concomitant decline in local air pollution, the growth of green-collar jobs, and the resulting benefits to human health and community, accrue to the places that have capped their emissions. It also avoids discouraging WCI's geographic expansion over time.

9.7 We are concerned about the apparent lack of rigor in CDM offsets. If CDM offsets are allowed in WCI – and we hope they are *not* -- then they should be subject to a significant discount rate (i.e. 2 tons of CDM offsets is equal to 1 ton

of WCI carbon permits) in order to ensure environmental integrity in the offset program.

9.9.1 It is unfair to count the collateral benefits of offsets and not also count the collateral benefits of reducing emissions. For example, scaling down a polluting coal plant also improves local air quality and reduces mercury exposure. Reducing driving also reduces the health risks of driving (car crashes are the leading cause of death between ages 2 and 45). And so on.

10. REPORTING

10.2 **We believe that the proposed reporting threshold of 10,000 tons may be too low.** Earlier in these comments we raise concerns about WCI's proposed threshold for regulation. (Please see Section 3.1 of this document.) If the proper regulation threshold is 10,000 tons then the reporting requirements should begin at some level *below* 10,000 tons. As WCI's proposal is currently constructed it may be very difficult, as a practical matter, for WCI to meaningfully lower its threshold for participating in the cap and trade program because there would be insufficient reporting data to support including smaller-emitting firms under the cap. As a consequence, the program's comprehensiveness and environmental integrity could be jeopardized.