Wednesday, July 17

7:00 Dinner and Introductions Power going well/ need progress on transport/buildings Where are some of the newer states gong? Speak about new states: NJ, NM, CO States really working it: WA and OR NY – big announcement tomorrow Recognize over-packed agenda – please put topics on the agenda

Thank you to CNEE, Georgetown, RMI

Intro – what really excited about?

Ritter: idea – meet post leg session/when hardest part is over, invited 15 states/all here, hope to see connection from this meeting to a good idea. Can state action create net effect w DC – no better place to work right now

Cummins: W states on air quality and climate – like regional convenings

Frisch/RMI: America's Pledge – answer to what it all adds up to

Corvidae: concept – applied hope, fantastic example

Krueger: Arroyo in Germany for ultimate frisbee team, Work w/ TCI states

Grumbles/MD – support 100% clean by 2040, w/ clean/RE policy, in context of RPS veto

Nichols/CA – ref Gina Mc, hoping for good things from conspiring

Toor/CO – climate goals adopted by leg, cabinet working together really well Bobzien/NV – real job on climate/energy policy, real oppty: relatively small state and working group on all things climate, working to ID comms to Gov on how to do all needed

Bryk/NY – sign leg to decarbonize announce tomorrow, link to fed prospects states set table, already ID good ideas

Campbell/RBF – hear dynamics – important and promising

Ely/NM - ref Richardson, come back out of retirement w/ MLG

/VT – seen as cute puppy, note emissions going up, R Gov interested in making changes, and interest in collaboration—TCI beyond, buildings

Davis/WA – great invite list, excited about different kinds of policies, seeing enthusiasm, excited about political

/MA – conversations with counterparts, R Gov – defined climate change as term 2 priority

, lots of pieces, incl TCI, raising rev for adaptation

Schuler/WA – happy to have R Govs, inspired by so many states – old/new Govs – great outcomes, and states say not yet done. Highlight: HFC phasedown modeled after fed actions, see almost perfect substitute for fed gov't

Pierce/CO – ref carbon bill, note suite of bills to meet carbon bill targets, note office of just transition

Burke/RBF – believe in states as driving force

Coit/RI – RI first female Gov, excited about Gov conversations on TCI, urban forestry project

/HI – PUC comm since May, previously in Ige admin on env't policy, and HEC, passed enviro and carbon—want to make sure it all works together

Propst/NM – agency roles, ETA - -uniquely NM bill – solved for everyone issues, task – change from o/g to clean energy economy

Crowell/NV – Bobzien/he are env't in NV, lots of education to do, ironically R Gov maybe better aligned than D, 3-5 years form out coal, transition to clean, positioned to move look to Gov Ritter

Steer/WRI – inspiration – all of you, thank you for leadership and influence global gov'ts Frangione/NJ – Gov in 2018, a bit ahead of others, oversee policy team and POC to cabinet, matters she is assigned that role, permits broader view of climate/energy – community solar addressing wealth disparities, offshore wind

Gordon/CA – offshore wind/Navy issue, so much is happening/many goals – commitment to move to action, integrate climate through other issues, permeation to every policy area

Blosser/OR – any normal year would have been blockbuster, abandoned single family zoning, thwarted temporarily

8:30 Hayloft conversation on the international climate negotiation; and on how states are successfully setting and implementing science-based targets.

Dr. Andrew Steer, President and CEO, World Resources Institute --

Michael – push group forward with a little bit of humor and lots of smarts In biz of silver lining – you are it

Impact bigger because we have Trump in WH

Note UK action – 2030 net zero to prove they are player

Everyone asking what US really doing

China visit to really learn how serious US is

2 experts -- 1 says great progress – RE, markets. 2 say going off cliff – 1940 in bunkers -- Q: who right? Both are totally right

Dog chasing accelerating van, needs to get on scooter

IPCC 1.5 blessing – says incremental not enough – need progress in all direction – global discussion – address path dependency, inertia, vested interest – Trump understands this

Ref new climate economy/Calderon – only jobs/growth if address climate change, need to capture this

Ref Modi – make India great again, biggest solar increase in history – get disruptive change and future of economy

Like announce of decarbonize by 2050

Global needs – political way of explaining things

Figueres on cut in half over each of several upcoming decade

Need to be on path to 1.5 degrees

2020 is super year – by end, need to ramp up level of ambition – make or break on Paris deal if don't get rise in ambition

US contribution –pledge and review – individual pledges will not get there Plans for global meetings – Italy/youth, Brits – convene Look to Sept summit Improve NDCs and need long term strategy to 2050 by 2020 States will be highlight of US offer Countries showing up w/ carbon neutral commitments 2050 matters, have to half by 2030 Better is not enough/have to lead Changes in which countries show up to lead China can peak 2025, not 2030 EU recent meeting – could not get to shared carbon neutral – might do

one by one

Job/growth in low carbon economy Note: Climate summit/September Concluding thoughts

- n Contribute to new global governance
- No longer gov't to gov't new multi-state, w/ local and corporates
- N Project/climate federalism note lack of state to fed connection big issue for Sept summit
- n Need narrative that links economy to what trying to do
- Need compelling story about what economy will look like
- n Grades for sectors need revolutions
- n This group gets it
- What should NDC be? Denomination is from today halve carbon by 2030, GHG 2050
 - Consider shadow group to prepare for that
 - o Brits want COP post-election want success
 - Ex; Brit de-politicized expert group
 - Look to best analysis in US
 - Kate need to consider shadow what if does not happen what if states separate from official reps?
 - o Don't over-estimate rigidity of UN process
 - Role for negotiators but see role for private sector don't be shy

Kathleen Frangione, Chief Policy Advisor to Governor Phil Murphy

- n Science based target reflection, what NJ needs to do
- Murphy run sought LCV endorsement ask = 80% clean/2050 he said do more
- n 100% not notable anymore fast shift dialogue moves quickly
- n Had foundation of strong statute
- n Consider interim targets
- n Note absence of state-level data
- n Bill on Gov desk for more concrete goalposts inventory, reporting, interim targets
- n Consider metric-driven approaches

- n Will meet RE goal/nothing else holding to account
- N Working w/ RMI on energy master plan how to get on path now
- n Interim targets help understand how to get there
- n Separate plans trying to align them
- n Line of sight to 2030, the
- n How get leg to pay attention to plan?
 - § Strong enviro plan
 - § Outside power sector is harder
- Crowell need to understand upfront investment/action to get to other sector goals. CA market drive helps
 - § How change dialogue to put something behind ambition
- Dale have this issue
 - § Marker bills that never moved, but happening now
 - \$ Some without "thought thing" need to figure out how to deliver on the leg
 - § Help each other tech/econ analysis, policy power, bldg., transport
 - *§* How extrapolate to regular people
 - § Tell success stories
 - § Do together so all moving on policies
- Nancy takes one/more admin agency to do implementation right regs/figure backstop. Can't do with just a few people
 - § Predictable leg adds for \$/staff
 - \$ Land use/transportation is a different world need to engage other agencies
- Bobzien defend leg when comes to power sector, look to politics relatively easy political landscape, as long as utility makes \$. Harder w/ transport, land use. OR – can plan at state level. What oppty to link local gov't w/ leg who want to the right thing. The don't have same change capacity as NV Energy. Tough stuff comes later. Transport about VMT – people still in cars.
- VT call out NGO partners, history set target w/o meeting.All work in electric sector/none focused elsewhere. Need message on need to do more Need message on why what already doing does not get there. NGOs help leg leaders think beyond the easy stuff. NGO invited to suggest ideas – none forthcoming. Address capacity in, but also beyond govt
- Davis/ WA to Mary: Could CARB do w/o AB32 targets? Look harder at agency authorities. Need leg delegation to agencies. Mary – array of workshops/provided basis to fight back. ID villains/blocks in advance. Offer to share playbook

- MA sued by CLF re: statutory limits, complicated in context of regional market. What counts. Education component for NGOs. Need tighter regional collab conversation and NGO education
- NJ NGOs not advocates of regional pressure to consider power emission caps
- VT look to NY on NOx, Sox to bring equity communities around
- Bryk work on this, pay attention to transport emissions. Carbon price driven by variety of reasons. Consider do same thing in region to send clear market signals. Work on gas, DR, workforce training for heat pumps. Use timeline for threat of customer connection
- Mary Transport is #1 source emissions
- NJ how to move to harder sectors
- Kate: consider place-based investments in infrastructure. Can't forget climate resilience. Land use, fire, flooding are big deal
- Crowell wildfires wipe out gains --
- Joe/RMI– bldg./transport matter and hep resilience and equity oppty for high ambition space
- Bill R: set up for tomorrow. Gas issue matters for biz case

Placeholder on role in int'l discussions – for fed and int'l, what does it look like to step up state role - consider Climate Week, COP Mary: consider bringing leg to int'l meetings

Thursday, July 18

7:00 am Breakfast buffet available in Coach Barn

Agenda Review and Meeting Objectives, Governor Bill Ritter, 8:00

CNEE

- Time meting for post leg session -
- Target outcomes from high anxiety to high ambition -
- People working in serious way
- Consider leg session 2020
- Framing _
 - 2020 state leg
 - Engaging other states
 - Multi-state collaboration
 - Federal Action
 - International Action
- 8:15 Summary Review of High Ambition Policies. Please review the two documents provided in advance. Please share your questions and suggestions for additions. These are intended to be resources you and others can use to further policy goals in your states.

Steps

Decarbonize power – note changing gas/RE markets

Move away from direct fossil fuel end use – building elec/transport

Land use - natural and working lands - resilience

Document helpful – needs a few corrections

Kate: CCS for ind end-uses – link to plastic recycling?

Blosser – ran into trouble with industry (different in different states) and people w/ very good lobbyists. Transportation – need to separate segments – issues with freight. Notes issues w/ funding gap. Looking at kW-hr fee for user fee equivalency. Bobzien: Need to address infrastructure. Mary: gas tax is not solution – it does not work either. EV policy can be oppty. Note RAP paper

Managing EITE industry -

Will – partial carve-out (Sen Pres), looking oil/gas

Hannah– carve out for industrial – timber/pulp

NIk – timber owned by int'l players. If at 95% best avail tech, separate treatment – created process/period of uncertainty. Mills in swing districts

Mary – year+ process calmed some people down, left says should have been tougher. Mantra – program is about cap, not trade, but industry cares about this. Need to

consider value in getting started vs compromise/locking in lower bar

9:00

Meeting the Challenges Posed by the Transportation Sector

- Update on federal vehicle standards and states' response
 - How can states work together to establish ambitious federal and state emission standards for new cars and trucks?
- Status of Transportation and Climate Initiative
 - What can other states learn from this effort?
- Discussion of other strategies to address CO2 emissions from transportation (e.g., incentives for EV purchases and charging infrastructure, Low-Carbon Fuel Standards.)

More difficult than power, in part because of fed gov't role To Mary: frame for going forward

- Recent CA action guided by good work at UC/Davis ref: 3 revolutions (shared, autonomous, electric) – demand for mobility unlimited, but need to address or things will get worse. Helpful framing for policymakers
- Consider incentives and mandates
- Tech can be friend or problem
- VMT debates feel tired solutions have not worked well. Transit invest more/get less. Lots of leadership coming from cities
- Half land mass rural, lots of suburbs built around autos/failure of that model, concentrated urban
- Rapidly beginning to develop policy/tools for EVs/passenger sector
- Freight issues are huge need to consider/invest in infrastructure
- Suggest consider climate infrastructure

Bill – states following CA – waiver, EV, LCFS – States follow CA – is this still a good idea

M: authority comes from CAA, all waivers have been litigated. Now have capacity equal to fed gov't. CA acts and fed moves to fill in behind. Important role to play. Helps to have other states defend 177 authority. Passionate about path to more EVs – only works if joined by other states

Thinking to alter reg structure?

Don't see shift in CAFÉ – not national program, 2 regs, not working well. CAFÉ outlived original purpose. Should go away, but may in effect. Look to climate reg as substitute Use CAA, better understanding of what is happening on other 177 states – working on this, could be more effective

Will: Room for collab on next-gen standards?

Mary – consumed by defense, but quiet work on paper – target is action Sep2020 – would need fed waiver, involves changes in how certify vehicles. Make about software not equipment

Brad – working on where get emission gains, not seeing in light-duty, interested in heavy-duty and fleet, esp interstate comm'l vehicles which need separate infrastructure. Katie D: using VW on trucks, analysis of power draw is high, look to offshore wind penetration and curtail/spill, battery not enough for several hours – how much wind/storage – maybe hydrogen production linked to heavy duty

Dale: analysis of RNG – use in heavy duty – possibly air/other. Need to design for uncertainty, while paying attention to compliance obligations

Nik: looking at battery disposal? Yes, but first thing is making them more efficient, longer lasting, then move to stationary.

Hydrogen? Mary carve out and looking to 100 chg stations. Note: Shell view of hydrogen biz case helps – links to

Bill: talk to fleets – automation/EV – happening at UPS, FedEx, Amazon. Electric truck advantage on maintenance – dealing with chg infrastructure for fleet of trucks w/ 1MW batteries

David B – bill relax weight std. see moving this from Gigafactory to Tesla/Fremont w/in year

Mary: Elon hates hydrogen

Kate – look to hydrogen/can repurpose gas/charging. Consider whether need to choose one/other

Ben: Hogan chr NGA – committed to climate leadership – infrastructure will be top priority. Encourage people to build onto this for transport resilience/EV infrastructure. MD EV infrastructure council push to consider H, shift to zero emission council Zach – looking to conversation about REV-West expansion

Sarah/Sandra – NM in re-evaluate mode. Looking to LEV/ZEV – watching status of waiver. Mary – CAA/177 – some in Trump admin have made getting rid of this a crusade (DOT/Justice). See move to GHG frame is a hook. Frustrating when industry not initially prepared to defend CA authority. Trump admin made a change – increasing fear of uncertainty more than of status quo. Part of this is looking post-2025. Status – NPRM has not gone to OMB – hearing delay till September/Fall. Expect 60-90 days at OMB. Will depend on strength of case. Now talking with several companies about what could be done to save national program. Waiting has been good strategy so far/nothing bad has happened. Lawyers see more than trivial chance that GHG standard would not

prevail if went to SC. Timeframe for CA plan? Next week. If CA acts, will there by stay?/ given expectation that will influence other state plans. M: will ask for time to review. Bill – very likely fed judge will stay enforcement. Industry says will continue to comply until word arrives

TCI

Katie – focus on NE – market based system using RGGI experience. Last 5 years – multiple statements of some states (different states). Conversation among 12 states remains solid. Ref: Georgetown support /analytic work. Addressing stakeholders: rural, urban, equity. Held state and regional workshops. Offer principles: cost effective carbon mitigation, equity. Jan kick-off process, target model rule in December, then do homework on authority

Cap on emission, permits – move along cap/invest

How measure? Easiest at prime supplier, people who move transport fuels across state lines.

Chris Davis: how working on authority to cap? Different among states. Dealing with directed funds to transportation

Katie D – use best to move interstate – Develop template, enact at state level – dealing with critical mass questions

Zach – how many states now have authority – few

Rural feedback? Positive on mobility, less on gas price increase, transit options. More positive: on-demand van pools, maybe autonomous. Peter: encourage consideration in terms of look to future

Ben – Gov's commit to design program for on-road transportation – avoid ICC, label as highway tax. States need flexibility, autonomy, sovereignty to decide on use of revenues Katie -- frequent meetings – Georgetown funded

Working groups – leadership team, exec policy, investment and equity, comms, legal, technical – expect to see/consider modeling results in August, then vet proposal. Keep Gov's in loop for upcoming/critical Sep/Oct/Nov deadlines

Schuler – WA working on LCFS, problem is not revenue generator. What is OR/CA experience and how relate to TCI.? Joe – will be like RGGI –

Katie – need to ensure revenues drive incremental carbon benefits

Hannah – funds occur n 2023 – Katie – strategy – bond against it

Patrick – timing of leg – 2021, but expect conversation to start 2020

Katie D – see engagement and momentum

Dale – price is not the driver of the change – small impact early, but will drive

opposition, consider complementary policies that are driving reductions. Need to win comms battle – leading message on benefits/not cap

Joe – power sector supportive – makes a difference

Mary – how much does this fund transformation to EV? Yes. Dale – do still need complementary

Katie D – pay attention to utility EV revenues – keep difference between benefits and integration costs positive

Keep prices low at outset, then decline cap – will not be on its own consistent with state carbon goal

Janet – emphasize bipartisan climate leadership on highly ambitious idea. Focus on benefits – health, infrastructure, recognize role of politically influential govs What are states doing

KatieD – TCI, increased revs form electricity to work on clean

Sarah – utility EV planning, hope Gov will include tax incentive LEV/ZEV – bandwidth issues w/ methane. Expect another EO. Looking to REV-West

Kate G: VMT issue is a big one – even if 10X EV, still need VMT. Housing near transit/jobs/services – link to eco devo and urban dev, climate risk – fires create conversation on land use/high-risk issues, looking to supply side, \$ in budget for roadmap to carbon neutral by 2045

KathleenF: make sure not just DEP, engage DOT. Will work on multi-agency integrated function. Looking to rebates, attention to transit -- reliability, slower on carbon Zach: transport funding challenge, ozone non-attainment, utility EV invest, state tax credit, VW repurpose to clean transport. -- next: look LCFS

Hannah/ME—not pent-up demand. TCI top priority, consider rebates extreme range anxiety

Ben – congestion in metro DC

Nik – carbon pricing, congestion pricing, transportation funding

HI – report assess options, look at VW funding, considering invest in fleet/tour. Leg granted public service charge eval opptys, incl credit, need to get to implementation/not study

Brad: transport greatest emission share, want ideas looking to 2020, owe report to policymakers on options at year-end, EO on climate goals, incl transportation elements. Look to CO for lessons – Will/do LEV/ZEV together, great strides on electric highway

Dale – TCI, LCFS, address pollution in overburdened neighborhoods.

Sandra – thinking LEV/ZEV, VW for infrastructure, fleet and EV infrastructure, need to work with tribal partner

Janet – TCI is major focus, VW settlement for dies

David B – NYT article – electric highway, consider REV-West refresh – priority that it goes, VMT study

Peter – TCI priority – conversation valuable even if don't get all the way there, incentive, alert to gas price impact, gov leadership helps with slow mover, encourage Govs to meet in person

Mary: move 80% of utility LCFS into incentives. Biggest obstacle is dealers and this addresses that gap – money on the hood

Katie T – outside TCI, DEP program on infrastructure, phasing out program, then will bring it back. Leg to get uber/lyft emissions data – address those fleets, esp since congestion contributor, VW for electric buses, 80 by 50 on transport and buildings Will – ZEV rulemaking August – share info n complication when opting later in program

higher reqs in later years, LCFS stakeholder/assessment in Sept/fast time frame.
Utility require to submit plans – want them to think big -- \$100Ms, not \$10Ms.

Stakeholder process on sharing/autonomous vehicles/anticipate fees on TNCs - -look to this as model for autonomous vehicles (storyline: what if cheaper for autonomous vehicle to circle sport arena than park). Also looking to SB375 analog.

Reid: likely try again on LCFS/though calculus may not have shifted. Create understanding that, when ready to move, LCFS must be in package. Tortured history

led to poison bill. Looking to pass ZEV standard – argue need even if moving w/o – get ahead of post-2025 adoption. How to accelerate shared, C/T proposal – not clear how serious it will be – would come from transport after clean. Clean bill includes space for action. Chris on regional – PCC – infrastructure and W coast fleets – make demand-side pull visible. Highway – push for standardization of infrastructure. 5 progress

Michael – foundations/NGOs absent, NGO oppty

Katie D – what helps – what links to other states

Bobzien – agree on fed connection, interest in REV-West – ref every 50 miles is tough, what are building blocks

Will – second comment – NGOs absent in some conversations – ex LCFS, transit/land use – helps to create political momentum

Peter – need help exciting customers

Sarah – see relationship EVs to solar power

Brad – not just policies/technologies but stable funding mechanisms

Janet – enviro comm not helping w/ TCI – citing need global warming solutions at Hannah – need comms strategy/resources

Bill – point well taken

Sarah – NGOs have hard time pivoting from enemy admin to friendly admin Bill – utility feels that even more, pivot may require change in strategy

Mary – big nationals/regionals running out of steam, some exceptions—note Fresh Energy – how take this model to other places. Funding to EJ in not very thoughtful way – tendency to fund any group that comes along – ID leadership that is diverse and understands the more difficult tradeoffs – may deserve separate conversation Michael – note activity we see at city level

Kate G – land use challenge – cities control and are fighting/new housing – not considered climate agenda

Zach – NGO/EJ – challenge is NGO relationship w/ labor - build connective in more enduring ways

Katie D - 40% of workforce in state gov't in 2022. If states are where happening, connect students to state agency jobs - several nods

Peter – lots of activity at cities, but still beholden to states (who are beholden to fed) Bill – EF board – note \$ shifting to China/India, suggest link to BB Beyond Carbon

10:00 **Power Sector**

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Achieving 100%

Replacing Coal with Natural Gas?

Bill – gas conversation

E&P – how translates to power and built env't, and transport

Observation – changing situation

10 producing states

Directionally drilling can extract 10,000 to 15, 000 feet from drill head

Long supply chain, long-term trajectory of low prices – view of good/affordable power

Observe desire – utility – affordability, reliability, sustainability

W – coal out, no net new E – coal out, 75% replaced by gas

Corollary – no benefit over coal when look at chain/leakage rate – 2.3%, if over 3%, lose climate benefit through methane

CO – what Co dd. CO has existing set of rules upstream/midstream – step forward at time. This year o/g reform – more to local gov't, o/g commission authority to say no, move to continuous emissions monitoring (tech issues), moving closer to zero methane emission. 20% of sites are 80% emissions

NM – two producing basins -- NW/gas – worry about leaks. Permian – oil production booming, 400% increase, apps to permit up from 400/yr to 1800. Traffic, produced water. Gas is incidental – flaring and venting. See handle through prevention of waste. Gov EO says look to methane from O/G first. Stakeholder process this summer, public meetings end-July/early-Aug – look to tech/reg solutions. Have to work with industry because very important to state.

Sandra – collab to avoid duplicative/conflicting regs. Looking GHG, VOCs, smog – nonattainment—get right. Expect Sarah to go first, then to EIB. Talking with industry. Develop options paper, watch timing of rulemaking with respect to election Watch overlapping fed authorities

Bill – fed/ EPA NSR, DOI/methane rules – not enforced

Ben – politics – Gov banned fracking, gas not bridge fuel but gangplank – should not be leaky or long bridge

Bill – can't do w/o gas – if limit, has transition benefits – worry about lack of focus in E&P states. Not close to elimination

Katleen F – NGOs – enviros making life impossible, labor partner difficult – impossible road to navigate

Sarah – ref PNM filing on new gas – finance over shorter period of time Bill – watch overbuild of pipeline infrastructure

Mary – consider expand conversation if need to get to zero net carbon – this can't be exempt/industry must do its share - - RNG, capture, gas to power – no place where these discussions being discussed. Suggest joint conversation about proactive policies Kate G – also useful labor conversation – carbon management

Katie T – NGOs beat up – expect compressor station battle, for example, use planning work to show where bridge ends and what do with infrastructure

Reed – wrenching issue, dealing with ind gas proposals – clear divide ind/NGO – watch how language complicates conversation. Maybe align on where must be in 2050. IF all infrastructure in place today operates, we have 1.5 problems. Need to facilitate tough conversation

Dale: moratorium, mantra – orderly transition, note – states not dictating pipeline outcomes. Socializing transition to gas is legislated, so can't direct commission otherwise. Clean energy jobs beat pipeline jobs

David: note bills on consumption/RNG – clear examples of NGOs not wanting to engage – need help on bridge/when it ends . Need robust NGO response before lock in infrastructure

Katie D – gas keeps prices down while building more expensive RE. Solution is RE integration/ note batteries. Value will be capacity, industrial uses that must use gas Peter – get grumble about NGO – will not stop because easy issue – weak record of closing things early. Need clear end to bridge. Need to prove case of what next/end-state

Bill – helps to force the conversation upstream

Jacob – when look to end-goal, consider RNG for industrial where no alt, get rid of it in other sectors

Bill – utilities in favor of eliminating gas for res thermal, ref NetPower

Mary - need technology, it is expensive, need standard to force discussion

Will – just completed RNG potential study – will be relatively small supply 25% of diesel. Need to consider investments in dist system

Kate G: need to move away from jobs argument – construction short term – watch for disingenuous argument that hurts

Janet – EO on heating – don't have the vision for transition, where are most exciting things

Hannah – heat pumps work even in cold, transition from oil heating

Peter – replacement when something breaks is not oppty for customers to learn

11:00 Net Zero Buildings

- Standard Setting, Disclosure, and Mandatory Retrofits
- · Electrification Instead of Gas Heating and Cooling

In play Market mobilization Mandatory retrofit Zero net code

Mandatory retrofits

Cite bill, also bldg. standards – technology agnostic, cost effective analysis w/ social cost of carbon embedded –got labor support/bldg. trades Note NY action

12:00pm Working Lunch: Industrial Sources, Oil & Gas Methane, HFCs, Land Use

Moving industrial sources away from fossil fuels and onto clean energy sources poses a set of challenges similar to those associated with buildings in terms of efficiency, retrofits and electrification. In addition, some states face the issue of a rapidly expanding oil & gas sector and associated methane emissions. Several states are early movers on HFC's: what are the lessons for other states?

We will break up into 3-4 groups over lunch for a discussion on the model tools, policies and incentives states can use to make progress in these sectors?

Carbon Pricing

- Recent actions two models economy wide/tied to state goals, single sector, goal less aggressive than overall state cap
- West states same place now, carefully looking to market-based mechanism need to build infrastructure for that gradually desire for regional conversation

- Lessons from OR lessons: regulated entity may not be the biggest issue
- CA phased in coverage to trade-effected industries

HFCs

- Need for fast action
- Reason to act potency, bang for buck, prevent down-the-world worse
- EPA pretty good rule/stopped by fed court CA moved, WA by leg
- Probably not very hard because no organized opposition/some support
- Data all in federal docket
- Note: key priority for US Climate Alliance is gathering info on short-term commitments
- Vt just moved on this
- MD announced at GCAS beginning to meet with stakeholders

Land-based storage/resilience

- Discussed offsets challenges, need to positively value
- Credit trading systems
- Look to verification Alberta
- State work
 - \circ Look to sage grouse in NV market based mechanism
 - o Dairy VT
 - LCFS CCS
 - HI sequestration
 - Working lands
- Wildfire mgt value avoided emissions/avoided risk
- Consider how to engage on insurance
- Climate Alliance work group on this topic
- Can conversation USDA hosted under Obama admin be restarted
- Michael is their option to engage rural constituencies otherwise difficult
- Kate avoid conversion of farmland to sprawling development

1:30

Carbon pricing strategies

- Tough sledding in WA, OR, VA
- Opportunities to expand existing programs (RGGI, TCI, WCI, EU, China) and enhance collaboration between programs
- Carbon tax

2:00

Collaborative Opportunities

- Group actions by leadership states on policy and market creation
- Outreach / support for opportunity states
- Setting the Policy Stage for Federal Action in 2021/Preparing for the Worst
- Participation in upcoming COPs in Santiago and London

2020 State leg Props (also follow up to 2019 outcomes) Katie T -

- hope for no more RPS leg
- revenue raiser for resiliency investments
- Transportation network emissions counting
- In right place on GHG implementing past leg
- H/S will do carbon tax again
- Expect roadmap to 2050 to specify net zero already on that path
- Update global warming authority

Will

- N ZEV
- n LCFS eval
- n Methane rule
- n HFCs
- n Bigger things wait on 80 by 2050/50 by 2030 teed up for following year
- n Teeing up beneficial electrification bill welcome advice
- n Commercial bldg. standards
- n Intrigued by bldg. space
- n How to move social cost of carbon to gas side
- n Western state conversation on carbon market
- Codes traditionally local bill required adoption of 2003 code, rolling req for recent code

Reed

- n ZEV
- n Regulation TNC to accelerate electrification
- n Land-use planning
- n Net zero codes for new construction residential
 - § Looking for advice on stretch codes == reckon w/ BOMA response
- n Roll back incentives for new gas infrastructure
- N Chris look to ACEEE/ASAP on app std/ref USCA—more states/more market pull don't need all – get 12

Mary

- Natural and working lands make them more resilient and capable of storing carbon—longer-term management oriented approach – Look at bill pending in MA
- n Longer-term auth on financial incentives light and heavy duty
- n Regularize/lay out vision for charging infrastructure buildout
- n Budget called for carbon neutrality roadmap
- n Expect something (?what?) on natural gas
- n Social cost of carbon not sure will be legislated Peter

- n Interest in building.
- n Eff VT collecting too much \$ for wrong things use differently
- n If TCI, will go to leg
- n Comm'l bldg. std
- Net zero'=
- n Appliance standard

David

- n App standard at top of list
- n Interest in TNC
- n LEV/ZEV moving ahead of next session
- n EV fleet, built env't. address funding question leg needs \$
- N Code like the rolling mandate idea, address solar fairness, builders will be back, guard against attempt to weaken ICC
- n Moving beyond power to other sectors
- n Deal w/ gas push conversation at utility purchase level
- n Political context
 - § No leg session next year give runway
 - § Need because starting from standstill
 - § NV bright blue right now not deep blue over long term leg need support

Janet

- n Assembly very conservative leadership don't care about env't
- n If care, put it in the budget
- n Priority sustainable funding stream
- n State court against oil/gas
- n Solar siting bill failed losing forests to solar
- Carbon pricing study out in RFP now asked them to take closer at Transport, link to other studies in process
- n TCI unsure if ready for prime team
- n Lots of good stuff on list
- n IF fed moves on infrastructure, would we be ready?
- n Biz community more effective than env'l need jobs/eco devo

Sandra

- n Methane
- n LEV/ZEV
- n Will take HFC to Kinney Sandra worries bandwidth
- Need to build agency capacity will look to fees (leg and reg venues reg easier than leg)
- n Climate task force building on reports coming from agencies soon

- n Short budget session solar tax credit bill, maybe EV credit
- n Know will be asked to put comm solar on as not sure what will do
- n w/ oil/gas boom, one-time needs maybe state parks and
- Zach navigating tension between utilities and 3rd party NEM, interconnect coming. See link to storage]
- n Michael NY moving on CCA Mary/Kate say be very careful
- n VT stopped program altogether
- n Will any net carbon decrease

ΗI

- n Community solar and microgrids resiliency
- n Leg budget adjustments
- n Election year half Senate and all of House
- Coming up on goal year for GHG below 1990 trending to success, suggest lower goal
- n Accelerating toward what next
- n Review USCA needs time for discussion of new goal

OR

- n Another run at cap/trade
- n EVs commissions to dealers
- n HFCs
- n TNC
- n Parking lot reqs

Ben

GHG and clean and RE standard (incorp current RE standard – nuclear, CCS, storage, CHP, hydro) – 100% clean electricity

Hogan to release 200-page plan on how to get to GHG goals Hannah ==

- n Passed
 - 45% GHG reduction
 - 80% RPS by 2030
 - Will launch climate council this fall

Kathleen

- n Have less structure session
- n Hope for EV charging infrastructure bill have authority but helps build coalition
- n Now spending lots of time on implementation
- n Broadly interested in electrification and buildings
- n Efficiency master plan
- n Offshore wind
- n PJM regulation consumer impacts

 Expect climate resilience EO and report on economic impact on climate change – investments and inactions

KatieD

- n Testifying at FERC direction is not helpful
- Dereg market keeps producing more gas plants, but pipeline issues low-cost RE cannibalize nuke fleet link to GHG plans on what happens to nuclear units means less room for off shore

Engaging Other States

- NGA – w/ MD Gov Hogan – Transportation infrastructure

Multi-State Collaboration

- US Climate Alliance
- TCI
- 2020 draft state reg on vehicle standards
- REV-West
- RGGO
- Setting goals
- PJM regulation and ISO NE focused on solving winter reliability
- Regional mechanism to compensate nuclear plants in New England
- Looking to new model for RA increases relevance of IRP
- EV utility revenue where possible, for heat pumps do through reg
- Storage procurement target
- Appliance standards
- TCI
- Efficiency procurement

Federal Action

- n Engage NGOs to prepare federal transportation model
- n Katie D drive land use solutions for USDA -- concern are we shovel ready 2021

States working with cities

- N UT require RMP to work with cities with 100% procurement Community RE Act
- n RMI working with NM state convening cities to align --
- n Heinrich lead
- n Michael note PCC model

Michael Will share notes on highlights What is plan, vision for transport, strategy on gas Note capacity issue Not trying to confound/duplicate USCA or other things in place

USCA meeting Sep9 – Lake Tahoe/NV

3:30 Next Steps

4:00 Adjourn and Optional Tour of the Rockefeller Estate for anyone who can delay their departure to 5:30.