

Section 111(d) of the Clean Air Act: EPA guides the destination, states set the route, and ideas for discussion.....

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Today's presentations

Karen Palmer – Resources for the Future (RFF)

- Basics of Clean Air Act 111(d)
- RFF modeling work

Victor Niemeyer – Electric Power Research Institute (EPRI)

- EPRI analyses
- Electric industry perspectives

Sue Tierney – Analysis Group

- Some implications for the states
- Some tough nut issues

Section 111(d) of the Clean Air Act

For **existing sources**:

EPA prescribes a procedure through which **each state submits a plan** to:

- establish a “**standard of performance**” for air pollutants (e.g., greenhouse gases (“GHG”)) that reflects the degree of emission limitation achievable through the application of the **best system of emission reduction** which (taking into account the cost of achieving such reduction and any non air quality health and environmental impact and energy requirements) the **Administrator determines has been adequately demonstrated**.
- Provide for the **Implementation and enforcement** of such standard of performance

EPA shall take into account **the remaining life of the life of the source**

EPA:
Where to go



States:
What model to drive to
get there

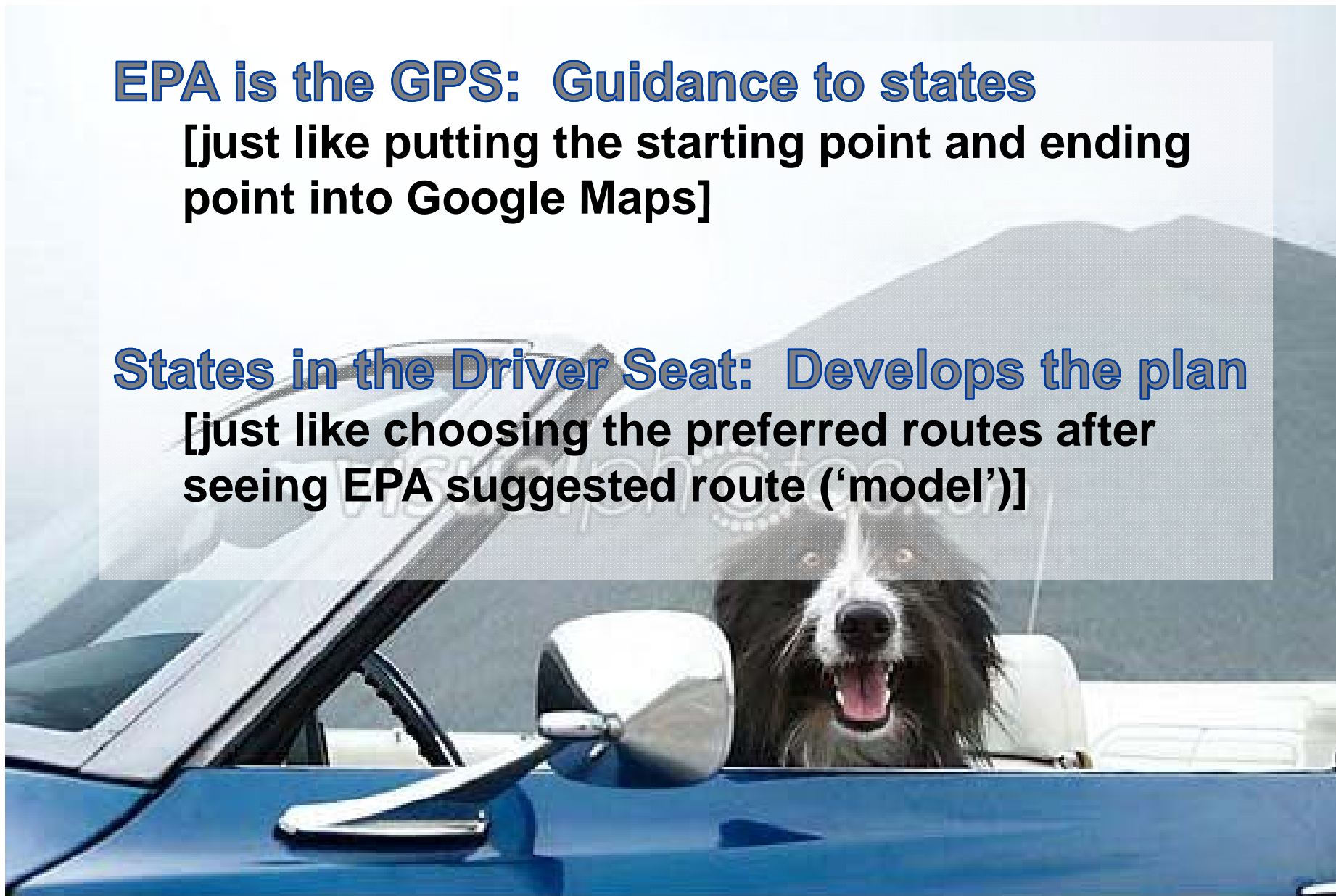


EPA is the GPS: Guidance to states

[just like putting the starting point and ending point into Google Maps]

States in the Driver Seat: Develops the plan

[just like choosing the preferred routes after seeing EPA suggested route ('model')]



Figuring out the route to reduced GHG at existing units (comments from EPA...)

“Cooperative federalism”

“Flexibility”

“Providing room to figure out how to manage the reductions”

“Trying to find a model that will allow all states to get there....given differences in generation mix, early action, costs....”

“The standard for 111(d) will not be the same as NSPS under 111(b)”

“Not a national cap-and-trade program”

- Not going to be a single national program of any kind
- Won't require a state to adopt cap-and-trade if the state doesn't want it
- Will consider cap-and-trade if proposed by a state

Theories of “Flexibility”

Least flexible

(potentially least stringent)

Unit-specific steps

- (such as fuel switching, heat-rate improvements, unit operating limitations to fit within tonnage cap, averaging of emissions over a time period)

Bubbling of emissions at a generating station

- (with or without the unit-specific actions above)

On-property

Off-property

Inter-station trading

- (within a single owners’ fleet within a state, across units within a state, across states,,,,)

Most flexible

(potentially most stringent)

Actions not occurring at a covered generating units

- (things that affect (e.g., displace; lower) output at covered units)
- (things that do not affect output at covered units)

What matters in all of this?

Section 111(d) actions:

Things that reduce emissions of GHG at generating units that emit GHG emissions

State action: examples

RGGI: power sector only

- Original 10 states (with loss of NJ) = 9 states
- Any program design changes? Potential new states?

CA: economy-wide; potential to link up with neighboring states

- New accords with Oregon and Washington
- Use of offsets relative to power section emissions reductions

Colorado – Clean Air – Clean Jobs

- Integrated resource plan for coal/gas resources

Other states

- Some combination of IRPs, state plans, other approaches

Issues of interest to the states (and EPA):

Credit for early action

- Cap-and-trade program versus project investment
- Timing issues

Common currency

- CO2 Cap versus CO2/MWh emissions rate

State equivalency

- Timing of reductions, scope and breadth and stringency of reductions

Safety valve:

- Implications for state equivalency

Other take-aways regarding the states:

Harmonization of existing (and/or modified) state programs

- Cap and trade
 - (e.g. RGGI – power sector only, with centralized auctions of allowances, and safety valve);
 - (e.g., CA economy wide program, auctioned allowances, with safety valve)
- Performance-based emissions reduction requirement (CO₂/MWh) – including allocation for free, no/some safety value

Leakage: lots of forms:

- Cross-state emissions leakage, cross-sector leakage within a state, cross-state leakage in light of economic dispatch

Geographic reach of the program? Tailored program design issues

- All states within an RTO?
- Multiple RTOs, interacting with each others?
- Bilateral MOUs across states within or in neighboring RTOs?

Some take-aways

EPA sets the destination(s):

- States are in the driver seat to figure out how to get to the designation
- It's important to focus more on the states than the EPA

Regarding the destination:

- EPA is not going to adopt/force a national approach
- Focus on the EPA “guidance” (6/2014) as a platform, only so much as to see the opportunity and target, and then shift attention to the states
- States can use EPA approach or propose another (that's equivalent)
- The things that matter are things that affect emissions at affected units

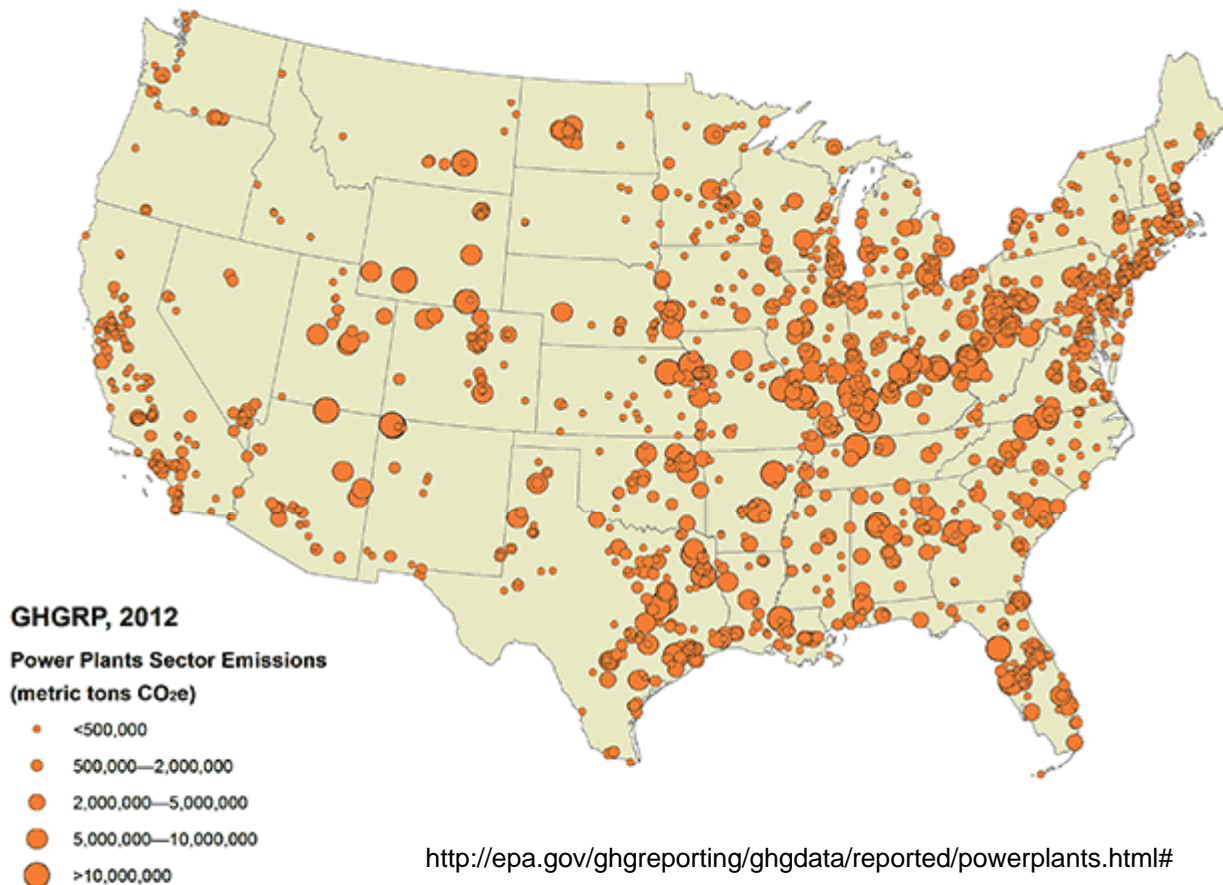
Enforcement:

Who is the entity accountable to EPA for meeting the approved plan to meet/implement/enforce the standard?

The state?

- (e.g., SIP)?

The covered emitters?



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<http://epa.gov/ghgreporting/ghgdata/reported/powerplants.html#>

Data Source: 2012 Greenhouse Gas Reporting Program

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