

## Stop Spewing Carbon Campaign

### Comparison of Most Relevant Air Emissions: Fossil fuels to wood burning biomass and “construction and demolition debris”

#### **Biomass and C&D are dirtier than coal**

Plant Name/Location	Fuel type	CO <sub>2</sub> /MW tpy <sup>1</sup>	NO <sub>x</sub> /MW tpy	PM/MW tpy
Boardman, OR <sup>2</sup>	Coal	9067	3.38	0.59
PVEC <sup>3</sup> MA	NatGas	3130	0.23	0.12
Russell Biomass <sup>4</sup>	Wood	12, 644	3.9	1.69
	Dirtier than Coal	+39%	+31%	+186%
	Dirtier than Nat Gas	+304%	+1596%	+1309%
Pioneer Renewable <sup>5</sup>	Wood	11,312	3.49	1.15
	Dirtier than Coal	+25%	+3%	+95%
	Dirtier than Natural Gas	+262%	+1417%	+858%
Palmer Renewable <sup>6</sup>	C&D	12,415	3.53	0.71
	Dirtier than Coal	+37%	+4%	+20%
	Dirtier than Natural Gas	+297%	+1435%	+492%

Comparison to coal (% above coal emissions)=[biomass level-coal level]/[coal level]

Comparison to natural gas (% above NG)= [biomass level-NG level]/[NG level]

**N.B. All the numbers were taken from proposals or environmental statements from the power producers. All the numbers reflect use of pollution controls.**

<sup>1</sup> Tpy=tons per year

<sup>2</sup> Boardman (operated by Portland Gas & Electric) is being re-permitted. Emissions figures are for 2014, when the two Massachusetts biomass plants are schedule to come on-line. Boardman is one of the few plants in the country with verifiable particulate numbers.

<sup>3</sup> Pioneer Valley Energy Center (PVEC) is a proposed 400 MW natural gas plant Westfield, MA. Emissions figures from company permitting applications.

<sup>4</sup> Russell Biomass is a 50MW wood burning plant proposed for Russell, MA. Emissions figures from company permitting applications.

<sup>5</sup> Pioneer Renewable Energy is a 47 MW wood burning plant proposed for Greenfield, MA. Emissions figures from company permitting applications.

<sup>6</sup> Palmer is a 38 MW construction and demolition debris proposed for Springfield, MA. Emissions figures from company permitting applications.