

## **Draft AQMD Energy Policy**

### **A Resolution of the Governing Board of the South Coast Air Quality Management District (AQMD) approving the AQMD Energy Policy.**

**WHEREAS**, the Governing Board has directed staff to develop an Energy Policy to integrate criteria and toxic air contaminants, greenhouse gases, and energy issues to ensure clean air and a healthy economy;

**WHEREAS**, the Energy Policy will complement policies, guiding principles, and initiatives previously adopted by the Governing Board (i.e., Environmental Justice Guiding Principles and Initiatives, Climate Change Policy);

**WHEREAS**, the total end use energy consumption in 2008 within the Basin was 2.2 Quadrillion BTU (or 2.2 billion million BTU), with 82 percent from fossil fuels and 18 percent from electricity;

**WHEREAS**, of the total 2008 fossil fuel use, gasoline accounts for 38 percent (6.7 billion gallons), natural gas accounts for 21 percent (460,000 MMscf), diesel accounts for 11 percent (1.7 billion gallons), and other fuels (jet fuel, residual fuel, propane) account for 12 percent (2 billion gallons);

**WHEREAS**, the total electricity consumption within the Basin was 113,200 GWh (or 113,200 million kWh) in 2008, of which 30 percent was generated in Basin;

**WHEREAS**, the electricity generation capacity within the Basin currently online is an estimated 16,600 MW with over 85 percent from fossil fuels and less than 2 percent from renewable energy (i.e., solar, wind, biogas);

**WHEREAS**, the total NOx emissions contribution from all energy types in the Basin during 2008 was 860 tons per day with 54 percent from diesel, 25 percent from gasoline, 9 percent from natural gas, 9 percent from residual fuel oil, 3 percent from other fossil fuels, and 0.3 percent from electricity production;

**WHEREAS**, the total direct CO<sub>2</sub> emissions contribution from all energy types in the Basin in 2008 was 135 million metric tons per year with 40 percent from gasoline, 22.5 percent from natural gas, 13 percent from in-Basin electricity generation, 11.5 percent from diesel, and

1 13 percent from other fossil fuels (jet fuel, residual fuel, propane);

2       **WHEREAS**, the toxicity weighted emissions contribution from all energy types in the  
3 Basin in 2008 was 92 percent from diesel (without particulate traps and will be 88 percent once  
4 diesel particulate traps are in place for trucks and ships, includes fuel oil), 6 percent from  
5 gasoline, 1 percent each from electricity (burning natural gas) and jet fuel, 0.2 percent from  
6 natural gas and 0.1 percent from other fossil fuels;

7       **WHEREAS**, Executive Order S-3-05 was signed in 2005 and set statewide targets for  
8 reducing greenhouse gas emissions to 1990 levels by the year 2020, and to 80 percent below  
9 1990 emission levels by the year 2050;

10       **WHEREAS**, California passed SBX1-2 in April 2011 that will require utilities in  
11 California to increase the supply of electricity produced from renewable energy sources to 33  
12 percent by the year 2020;

13       **WHEREAS**, total regional annual expenditure on fossil fuels within the Basin in 2008 is  
14 \$45 billion, of which petroleum (transportation fuels) accounts for 81 percent of this expenditure;

15       **WHEREAS**, total regional costs due to poor air quality were estimated to be \$22 billion  
16 per year based upon averaged air quality data from years 2005 to 2007; and

17       **WHEREAS**, 67 percent and 75 percent NOx reductions beyond currently adopted  
18 regulations (as of 2010) are needed to meet the 1997 and 2008 federal ozone standards,  
19 respectively.

20       **NOW, THEREFORE, BE IT RESOLVED**, that the Governing Board directs staff to  
21 proceed with ~~implement~~ the following in future decision making, in a manner that promotes  
22 reliable, safe, cost effective and clean energy for all energy consumers in the Basin-Policies:

23       **Policy 1** - Promote zero and near--zero emissions technologies, through electrification and  
24 other ultra clean energy strategies, (including energy conservation/efficiency), to  
25 meet air quality, energy security, and climate change objectives;

26       Intent Statement: (To Be Determined)

27       **Policy 2** - Promote electro-technologies and other near-zero technologies in both stationary  
28 and mobile applications to the extent feasible;

Intent Statement: (To Be Determined)

**Policy 3 -** Promote diversification of electricity generation technologies to provide reliable, affordable, cleanest, and sustainable electricity supply for the Basin in partnership with local power producers;

Intent Statement: (To Be Determined)

**Policy 4 -** Promote demand side management programs to manage electricity demand growth and to reduce the need for additional capacity. Such programs include, but are not limited to, energy conservation/energy efficiency and load-shifting measures;

Intent Statement: (To Be Determined)

**Policy 5 -** Promote in-Basin distributed renewable generation as part of sustainable community development to reduce reliance on imports or central power plants, and to minimize generation carbon footprint and cross-media environmental impacts;

Intent Statement: (To Be Determined)

**Policy 6 -** Promote electricity storage technology to improve the supply reliability and availability, and increased generation technology choices of renewable technologies;

Intent Statement: (To Be Determined)

**Policy 7 -** Require any new/repowered in-Basin fossil-fueled generation power plant to incorporate Best Available Control Technology (BACT) as required by District rules, considering energy efficiency for the application. -These power plants shall also comply with any requirements adopted by the if deemed necessary by California Air Resources Board (CARB), California Energy Commission (CEC), Public Utilities Commission (PUC), and Independent System Operator (ISO), or the governing board of a publicly-owned electric utility, as well as state law governing the California Environmental Quality Act (CEQA), as appropriate to be the cleanest and most efficient technology for the application;

Intent Statement: (To Be Determined)

**Policy 8 -** Advocate, within the existing CEQA review process, maximum cost effective mitigation in the communities affected by emission increases resulting from the siting of new or repowered fossil-fueled power plants;

Intent Statement: (To Be Determined)

**Policy 9 -** Educate and incentivize the public to shift toward the lowest emission technologies in personal choice; and

Intent Statement: (To Be Determined)

**Policy 10 -** Incorporate energy efficiency via AQMD's rule-making activities, advocacy, and CEQA commenting function.

Intent Statement: (To Be Determined)

**BE IT FURTHER RESOLVED**, that the Governing Board directs staff to proceed with ~~implement~~ the following ~~Actions~~:

**Action 1 -** Advocate for and/or support detailed technical studies to identify viable electrification technologies and associated electric energy and capacity needs to support ~~an~~ electrification as part of the clean air strategy for the Basin;

Discussion: (To Be Determined)

**Action 2 -** Conduct appropriate socioeconomic studies to identify the societal costs and benefits for implementing further an electrification ~~strategy~~, including but not limited to, small business impacts;

Discussion: (To Be Determined)

**Action 3 -** Develop an action plan to develop and deploy electrification and near-zero emission measures for various sectors;

Discussion: (To Be Determined)

**Action 4 -** Conduct studies to identify measures to incentivize early introduction of electrification and near-zero emission measures and potential new transportation funding mechanisms to support substantial electrification in the transportation sector;

1 Discussion: (To Be Determined)

2 **Action 5** - Further develop and demonstrate technologies to maximize the use of low-  
3 polluting biogas and other clean energy sources from biomass;

4 Discussion: (To Be Determined)

5 **Action 6** - Actively participate in CEC, PUC, and CARB proceedings to promote policies  
6 and regulatory actions that ~~are consistent with~~ further the AQMD Energy Policy,  
7 consistent with state and federal law;

8 Discussion: (To Be Determined)

9 **Action 7** - Convene a stakeholder working group including, but not limited to, the building  
10 industry, local fire departments and building departments, and utilities, to  
11 develop recommended a standardized specification for electricity recharging  
12 installation for residential and commercial building applications to facilitate  
13 greater plug-in electric vehicle (PEV) market penetration;

14 Discussion: (To Be Determined)

15 **Action 8** - Advocate a separate electricity rate structure that incentivizes off-peak charging  
16 for PEVs through the Statewide PEV Collaborative which is comprised of CEC,  
17 PUC, CARB, local air districts and utilities while being sensitive to potential  
18 impacts on rates for existing customers;

19 Discussion: (To Be Determined)

20 **Action 9** - Partner with local utilities and local government stakeholders to promote energy  
21 conservation/efficiency through local actions (i.e., building codes, zoning  
22 requirements, and incentive programs); and

23 Discussion: (To Be Determined)

24 **Action 10** - Compile and track energy use and supply profiles within the Basin in  
25 conjunction with each Air Quality Management Plan update.

26 Discussion: (To Be Determined)

27 **BE IT FURTHER RESOLVED**, that the Governing Board directs staff to annually  
28 periodically report progress ~~(at least once a year)~~ in implementing this policy to the appropriate

1 Governing Board at a duly noticed public hearing ~~committees.~~

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