



## State and regional government action on climate change and the Clean Revolution

States and Regions Alliance | December, 2011

### ABOUT US

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The Climate Group acts as a catalyst for the world's most powerful governments, brands and public figures across Asia, Europe and North America, to push for the policies, technologies and investment we need to make the Clean Revolution commercially viable.

With the State and Regions Alliance, we have developed a strong global network of leading governments that identifies and shares best practices to stimulate the Clean Revolution at sub-national level.

The Alliance has a key role in shaping and promoting the message that the transition to a low carbon economy is not only possible, but will deliver jobs, economic growth and better standards of living.

Sub-national governments are responsible for policy, programs, legislation and fiscal mechanisms in the areas of energy, environment, transport and land-use. Measures implemented at the sub-national level can influence action at the municipal level (through grants and land use policy) and at the national level (through policy and funding proposals). Specific sub-national measures include, pending each jurisdiction; setting overall emission reduction targets, enacting building codes, establishing efficiency programs, enacting tailpipe emissions standards, regulating new transport technologies, setting renewable portfolio standards, establishing feed-in tariffs, setting land-use policy/regulations ( i.e. sustainable forest management), establishing green procurement policies and subsidy schemes, incentives or taxation policies to promote the uptake of low carbon solutions.

This note highlights some of the latest and more important actions by members of the States and Regions Alliance.

*\* The elements in this publication have been partially provided by members and in other cases are based on The Climate Group's own research. Some editing was necessary due to space limitation. The contributions as published here are therefore under the responsibility of The Climate Group and do not claim to be the exact choice or selection by the regions presented.*



### EXAMPLES OF KEY ACTIONS AND COMMITMENTS

#### **BADEN-WÜRTTEMBERG**

- The State Government of Baden-Württemberg is striving for the goal to reduce the greenhouse gas emissions by approximately 90 per cent in 2050 compared to the emissions in 1990. Therefore, a reorientation of the policies concerning the energy sector and climate protection is necessary especially after deciding nuclear phase out. Due to the importance of climate protection, the State Government of Baden-Württemberg will legislate a State Climate Change Bill including obligatory climate protection targets and instruments to meet these targets.
- On the basis of the State Climate Change Bill, the State Government of Baden-Württemberg will develop an Integrated Energy and Climate Protection Concept. The Integrated Energy and Climate Protection Concept will set up measures for achieving the climate protection targets putting great emphasis on public participation.
- Example for taking action in climate protection: due to nuclear phase out, the State Government is adjusting the regional planning law in order to allow local authorities to increase the amount of possible sites for wind power stations. During the next years the State Government is planning to install over 1200 wind power stations bringing the proportion of wind in electricity production from 0.8 per cent to 10 per cent.

#### **BASQUE COUNTRY**

- The Basque Government introduced the first Climate Change Bill in Spain. Targets include a CO<sub>2</sub> emissions reduction of 20% by 2020 from 2005 levels - a huge effort for a region where heavy industry accounts for 40% of its GDP.
- Its Action Plan for Climate Change, Ecoeskadi 2020 also fosters innovation and public-private partnerships such as an EV infrastructure agreement with Mercedes and Repsol.
- The Basque Region's main cities are likewise implementing ambitious climate actions. Vitoria-Gasteiz has been elected EU Green Capital 2012.

#### **BAVARIA**

- In response to German nuclear phase-out, the Government adopted a new Energy Concept in May 2011, in which it aims to double the share of renewable energy in electricity consumption from 25% to 50% and in primary energy consumption from 10% to 20% by 2021.

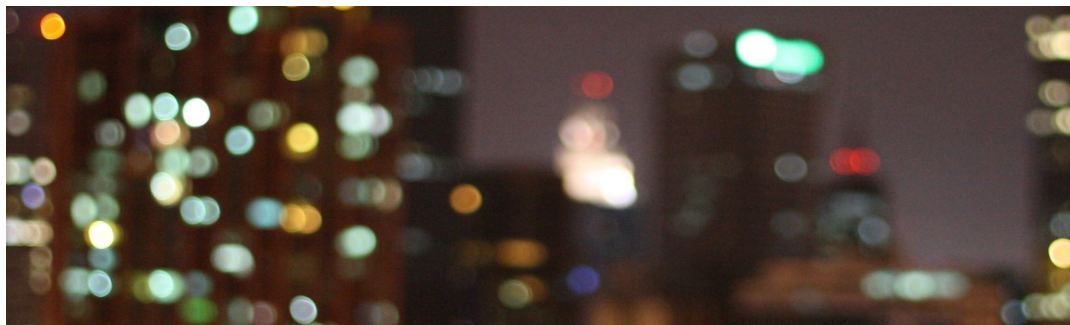
- It also foresees a reduction of heat consumption in buildings by 20% and in industrial processes by 15% within the next ten years.
- Bavaria plans to invest EUR 64 million in electro-mobility research in close collaboration with automobile industry and suppliers, aiming to bring 200,000 electric cars onto the road by 2020.

#### **BRITTANY**

- The Regional Council's 2007 Energy Plan focuses on wind power generation, with 1000 kilowatts of new capacity constructed in 2010 alone. Another focus is biomass energy, and the Forest Energy Plan will install 100 megawatts capacity by 2013.
- An Eco-Energy Plan is underway to help consumers reduce their energy bills through efficiency and smart metering.
- 335 projects have been completed since 2005 with an annual budget of EUR 34 million in renovating public buildings to high standards of efficiency and sustainability.

#### **CALIFORNIA**

- Following a Governor's executive order in 2005 which established goals to limit greenhouse gases to 1990 levels by 2020 and 80% below 1990 levels by 2050, California passed legislation in 2006 which established the 2020 limit in law and gave authority to the California Air Resources Board (ARB), working with other state agencies, to develop a strategic plan and programs to achieve the limit. California is now implementing the plan which includes low-carbon fuel standards, vehicle standards, efficiency standards for buildings, appliances and industry, goods movement, a requirement that 33% of all power generation come from new renewable resources and an economy-wide cap and trade program which creates financial incentives to reduce emissions.
- California continues to lead the nation with efficiency programs that have delivered over \$60 Billion in savings to California consumers, stabilized per-capita electricity consumption, and resulted in nearly 70% more economic activity per unit of energy when compared to the rest of the country. California also attracts more than 50% of the nation's clean-tech venture capital investment with over \$3.9B invested in 2010.



### CATALONIA

- The Catalan Government has approved an Efficiency and Energy Saving Plan which addresses its buildings and facilities for 2011-2014. With this plan, the energy bills of these public facilities will decrease 4.4% in 2014 and 15.2% in 2020. Public and private capital, through ESCOS (energy service companies), will invest in improving savings and energy efficiency in public buildings. This Plan will provide up to 296 million Euros in investment, and it is expected to generate savings of 419 million Euros in energy consumption.
- The EU ETS Directive only covers approximately 180 facilities in Catalonia. In order to engage as many organizations as possible to reduce GHG, the Catalan Government has implemented the voluntary scheme (Acords voluntaris). By joining this initiative, public and private organizations agree to annually assess their carbon footprint and publicly commit to reduce it by implementing specific actions. So far this year, 23 organizations have joined the initiative and many more are carrying out the preliminary stages.
- The Government of Catalonia is carrying out a Climate Package for 2013-2020, aligned with the Spanish Government and the EU 20-20-20 Strategy. This package includes a new Energy Plan, a new Mitigation Plan and the first Catalan Adaptation Strategy.

### ILE-DE-FRANCE

- In June 2011, Île-de-France (IDF) adopted a Climate Plan setting out priorities for climate change mitigation and adaptation. The regional Government will take a leading role in supporting the development of new low carbon markets.
- IDF spend a total of EUR 500 million to reduce the energy consumption of schools by 40% by 2020, from 2011 levels.
- Around 80% of France's geothermal energy are produced in IDF. 150,000 homes are heated in this way, avoiding 30,000 tons of carbon emissions annually.

### MANITOBA

- The province of Manitoba has been steadily reducing its use of coal. The province has regulated the phase down of its last remaining coal-fired generating station, which is now used for emergency purposes only. In addition, the province has implemented a new emissions tax on coal, which takes effect on January 1, 2012, which will be followed by a ban on coal in 2014. Revenues from the emissions tax on coal will be used to transition small-scale coal users from coal to biomass.

- In April 2011 Manitoba launched its Electric Vehicle Road Map. The Road Map will help the province reduce dependence on fossil fuels and take advantage of the economic opportunities associated with electric transportation. Much of the infrastructure that will support widespread adoption of electric vehicles in Manitoba is already in place. Manitoba has more than 500,000 existing recharging outlets, as well as clean, low-cost electricity. Manitoba has signed a memorandum of understanding with Mitsubishi Motor Sales of Canada, enabling the company to use Manitoba as a proving ground in the further development of its global i-MiEV electric vehicle.
- Testing, demonstrating and publicizing electric vehicles in Manitoba will ensure Manitobans have a better understanding of the technologies and their benefits.

### NEW YORK STATE

- New York's Cleaner Greener Communities program promotes community smart growth and sustainability through a \$100 million competitive grant program to help regions plan and implement activities to reduce greenhouse gases, improve energy efficiency, revitalize cities, and deploy renewable-energy technology.
- The state aims to cover 45% of its electricity needs from renewable sources and energy efficiency gains by 2015.
- New York participates in the Regional Greenhouse Gas Initiative, the nation's first cap and trade program limiting greenhouse gas emissions from electric utilities. Auction proceeds are invested in energy efficiency and renewable energy development.
- New York helped launch the Northeast Electric Vehicle Network, comprised of transportation, energy and environment officials from 10 northeast U.S. states and the District of Columbia to promote clean vehicles and fuels and electric vehicle charging stations and related infrastructure, as part of their existing collaboration through the Transportation and Climate Initiative.

### NORTH RHINE WESTPHALIA

- North Rhine-Westphalian Minister for Climate Protection, Johannes Remmel: "Climate protection is the engine for economic progress and environment."
- The NRW State Government has set on track the first "Climate Change Bill" in Germany with definite climate targets. The Climate Change Bill provides a legal framework for mitigation and adaptation measures. The greenhouse gas emissions in NRW are to be reduced by at least 25 percent by 2020 and by at least 80 percent by 2050 compared to 1990.



- NRW will develop a "Climate Protection Plan" to define intermediate targets and climate measures as well as the expansion of renewable energies and energy efficiency, a binding concept for a CO<sub>2</sub>-neutral state administration as well as measures to mitigate impacts of climate change.
- The NRW state government adopted a "Climate Protection Start Program" on 1 October 2011. The program lists 22 specifications of the state government, which are scheduled to start until the end of 2011. The new climate change policy in NRW will provide an important impulse for global climate protection.

#### ONTARIO

- In 2007, Ontario introduced the Climate Change Action Plan and announced its greenhouse gas emissions reduction targets:
  - 165 Mt or 6% below 1990 levels by 2014
  - 149 Mt or 15% below 1990 levels by 2020
  - 80% below 1990 levels by 2050.
- Based on the actions we have taken to date, Ontario anticipates that we are more than 85 percent of the way towards our 2014 target.
- Ontario continues to make significant progress in several key areas:
  - **Phasing Out Coal:** Our commitment to phase out Ontario's coal-fired electricity by the end of 2014 is on schedule. It's the single largest climate change initiative in North America within that timeframe.
  - **Greening Our Energy:** Our Green Energy Act continues to bring Ontario thousands of megawatts of emissions-free electricity and thousands of new clean jobs.
  - **Transportation:** We've made record investments in public transit, including investing more than \$10.8 billion in transit since 2003. Our Electric Vehicles Strategy aspires to have 5% of all new cars be electric by 2020.

#### QUEBEC

- In 2006, Québec adopted the most ambitious GHG reduction target in North America; a reduction of 6% of its emissions under 1990 levels for 2012. According to its 2009 GHG Inventory, Québec registered a 2.5% drop in emissions under 1990 levels - even though Québec's population grew by close to 12% and its GDP by 45% since 1990. This is a 8.7% reduction from the peak registered in 2003. The government is thus confident that it will reach its 6% GHG target by 2012.

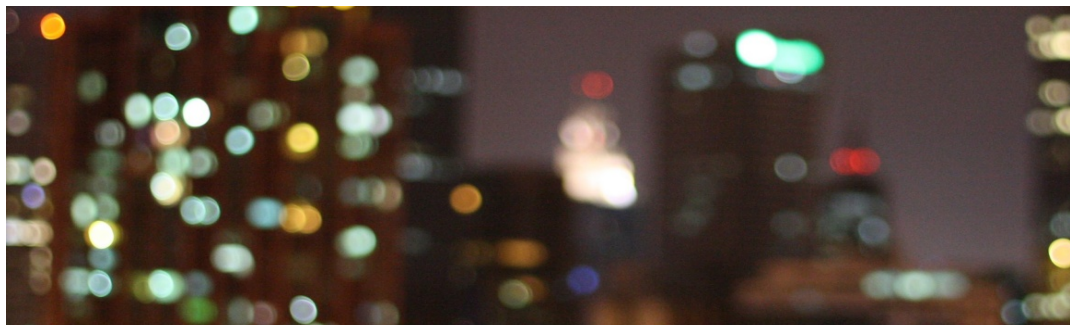
- Moreover, Québec adopted a new reduction target for 2020: a 20% reduction under 1990 levels. Most of the reduction will have to come from the transportation and industrial sectors as 97% of Québec's electricity already comes from renewable sources. An interesting challenge indeed!
- In 2008, Québec joined the Western Climate Initiative, a partnership of sub-national states and provinces which aims at implementing a North American-wide cap and trade system. The WCI is quite innovative as it aims at not only covering large GHG emitters from the industrial and electricity sectors, but providers of transportation and building fuels as well. It is thus an economy-wide endeavour!
- In July 2011, Québec has published its draft cap and trade regulation which should be adopted in December 2011. The system will go through a trial period throughout 2012 and compliance will begin in January 2013 for industrial and electricity facilities. The system will be fully operational when fuel providers are covered starting in January 2015.
- Our 2006-2012 Action Plan is Québec's major contribution to tackling climate change. Indeed, given a can \$1.6 billion commitment for the overall period, the Plan is a powerful tool of action. Since its launch, more than 2000 GHG reduction projects have been financed for a total of can \$975 million.

#### QUINTANA ROO

- Quintana Roo will be the first Mexican state to offset emissions from the operation of Government offices.
- A State Climate Change Commission was put in place in August 2010 in order to develop Quintana Roo's Climate Policies. The Green Quintana Plan adopted in May 2011 contains projects in the four main areas of climate change, air quality, solid waste management and the treatment of the Bojorquez marsh.
- Together with neighboring states Yucatan and Campeche, it is working to develop the first Regional Climate Change Framework in Mexico.

#### RHÔNE ALPES

- The Regional Council incorporates sustainable development into all policies and projects. Since 2005 the Council has launched 65 specifications.
- The Regional Council focuses on reducing carbon emissions in 261 high schools by installing 20,000 square meters of solar panels and control systems to monitor and reduce energy consumption.



- In supporting renewable energy, an ‘energy cheque’ scheme provides financial tools for individuals and the region provides clean energy assistance for business

#### **SAO PAULO**

- The São Paulo State’s Climate Change Policy, signed into law on November 9, 2009, commits the State to 20% CO<sub>2</sub> reduction by 2020 from 2005 level, allowing offsets through innovative mechanisms. The comprehensive policy covers land use, industry, commerce and consumer, environmental license, sustainable transport, water resource and waste, and disaster preparedness.
- Among the main short-term measures include the establishment of a GHG inventory; development of a sustainable transport plan, adoption of Strategic Environment Assessment and Economic-Ecological Zoning; and vulnerability and prevention mapping.
- Proactively leading the way, such innovative law is the first mandatory reduction target in a non-Annex I country located in the developing world.

#### **SCOTLAND**

- The Climate Change (Scotland) Act 2009 sets world leading targets of at least 42% emissions cuts by 2020 and at least 80% cuts by 2050, compared to 1990 (including international aviation and shipping emissions and participation in EU-ETS).
- In May 2011, the First Minister pledged to move “still faster and further” and introduced a new target for generating equivalent of 100% of Scotland’s electricity demand from renewables by 2020. We have planned development for offshore wind projects in Scottish Waters with potential to generate up to 10GW by 2020. Our £35 million Prototyping for Offshore Wind Energy Renewables Scotland POWERS fund will support production of full-scale prototypes of next generation offshore wind turbines, aiming to leverage £80m private investment.
- We are almost two-thirds of the way to achieving our 2020 emissions reduction target: in 2009 Scotland’s emissions had fallen by 27.6% from the 1990 base year.

#### **SOUTH AUSTRALIA**

- Ambitious target setting underpins South Australia’s Climate Change and Greenhouse Emissions Act 2007 which provide both the focus and framework for many of our regional climate change efforts. In 2009 South Australia increased its target for renewable electricity production from 20% to 33% of the electricity generated in the state from renewable sources by 2020. In June 2011, South Australia reached the initial 20% target, three years ahead of the state’s own deadline. A new Renewable Energy Plan for South Australia was released on 19 October 2011 to assist the future growth of the State’s renewable energy sector to meet the new 33% target.
- The South Australian Government adopted a new policy which requires that all new homes and extensions must meet 6-star level of energy efficiency since September 2010. This will cut the energy use of new homes a further 15-24 per cent below the 5-star energy rating mandated in 2004.
- South Australia introduced the country’s first premium solar feed-in tariff in 2008 and amendments to the legislation took effect from 29 July 2011. By August 2011, the tariff has contributed to the approval of 195MW of solar panels by households and small energy consumers across the state.

#### **UPPER AUSTRIA**

- The state has committed to generate 100% renewable electricity by 2030, and up to 2009 has already avoided 7.4MtCO<sub>2</sub> through the use of renewables.
- Upper Austria is driving ambitious energy efficiency programs such as ‘Save electricity now’, and new residential homes have to meet stringent energy efficiency standard.
- The CMOmax project aims to produce a 100% Upper Austrian-made electric vehicle. The state’s automotive cluster also works on the standardization of charging systems.

#### **WALES**

- The Welsh Government has committed to lead on tackling climate change in Wales. Our Climate Change Strategy confirms our target to reduce emissions by 3% per year from 2011, against 2006-10 levels. We are committed to reduce all emissions in Wales by 40% by 2020 (against 1990 levels).

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## States and Regions

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## THE °CLIMATE GROUP

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- The Welsh Government is already making solid progress. For example, our flagship energy performance investment programme, Arbed, has provided £30m in 2010/11 alone for energy efficiency measures in Welsh homes and green job generation in economically deprived areas.
- We have committed to share our approach with our international partners and learn from approaches elsewhere. Wales and the Mbale region of Uganda were selected as pilot regions for the UNDP's Territorial Approach to Climate Change programme. This project uses Welsh expertise to develop a climate plan for Mbale, to help draw in funds to support Mbale communities adapt to a changing climate.