

MIDWESTERN GREENHOUSE GAS REDUCTION ACCORD: DRAFT FINAL RECOMMENDATIONS OF THE ADVISORY GROUP

INTRODUCTION

On November 15, 2007, the Governors of Illinois, Iowa, Kansas, Michigan, Minnesota and Wisconsin, and the Premier of Manitoba entered into the Midwestern Greenhouse Gas Reduction Accord (the "Accord"). The Accord calls for the establishment of targets for greenhouse gas (GHG) emission reductions and timeframes consistent with states' and provinces' targets and the development of a regional cap-and-trade program design. In early 2008, the Governors and Premier convened an Advisory Group consisting of a diverse group of individuals representing varied interests from across the region, including representatives from state and provincial governments, business and industry, agriculture, environmental advocacy groups, and academia.

The Advisory Group was charged with making recommendations for the establishment of targets for emissions reductions in the region, and for the design of a regional cap-and-trade program. After lengthy deliberation and consideration of the various options for the participating jurisdictions, the Advisory Group has arrived at the draft final recommendations contained below.

The Advisory Group makes these draft final recommendations at this time in order for the Midwest to have regional influence in the current national debate in Washington, DC regarding a federal cap-and-trade policy. The Midwest has particular resources and special economic circumstances that must be reflected in a future federal program. These design recommendations provide a platform for those Midwestern concerns and priorities.

Midwestern governors and the Manitoba premier have as their first priority the implementation of an effective cap-and-trade program at the federal level in both countries, rather than a regional program. A strong preference for a federal system is shared by stakeholders participating in this Advisory Group. However, governors and the premier have tasked the Advisory Group with providing recommendations for a regional cap-and-trade system, should current efforts toward implementing a federal system stall. Final design recommendations to guide potential implementation of an actual regional program will be presented later this summer, following completion and review of additional modeling of macroeconomic and employment impacts now underway.

The Advisory Group offers the following design recommendations as a compromise package, which seeks to balance a wide range of regional benefits, concerns and tradeoffs inherent in the design of an economy-wide cap-and-trade program. Individual Advisory Group participants may disagree with particular recommendations, but recognize the value of the overall package.

DESIGN PRINCIPLES

In setting the regional reduction target and designing the cap-and-trade program, the Advisory Group considered the following design principles:

- Ensure that the system is equitable, administratively simple for government and private participants, minimizes administrative costs, and has a clear compliance path;
- Cover as many sources as is practical, while encouraging emissions reductions beyond the capped sources and sectors;
- Assure a transparent and robust data gathering and accounting system that will measure and report emissions accurately and consistently across all sectors and throughout the region;
- Distribution of allowance value should support the goals of the program, including compensating for disparities and impacts caused by the program;
- Enable linkage to systems in other jurisdictions with similarly rigorous accounting in order to create economies of scale and to increase market efficiencies, diversity and liquidity, while reducing costs;
- Maximize economic, employment, energy diversity, environmental and public health benefits, while minimizing any transitional job losses and energy and other cost impacts;
- Reduce the potential for emissions leakage, including the shifting of economic activity to non-covered sources and to non-participating jurisdictions;
- Stimulate investment, especially in low-carbon technologies, and reward innovations that will lead to near and long-term, permanent greenhouse gas reductions;
- Credit qualified past and present actions to reduce GHG emissions;
- Require any offsets to be real, surplus/additional, verifiable, permanent and enforceable;
- Allow flexibility for participating jurisdictions to meet specific policy needs and objectives, while maintaining regional program uniformity;
- Demonstrate leadership toward, and enable transition to or harmonization with, any future federal program, while ensuring the capability of the regional program to stand on its own, if necessary; and
- Reduce the potential for and scale of unintended economic consequences of the policy, while maintaining an appropriate price signal.

THE RECOMMENDATIONS

1.0 EMISSIONS REDUCTION TARGETS

- 1.1 Reduction Targets: The Advisory Group recommends the following emissions reduction targets for the participating jurisdictions.
 - 1.1.1 2020 Target. 20 percent below 2005 levels by 2020 (18 percent if allowances are released from the cost containment allowance pool detailed in 3.5.1).
 - 1.1.2 2050 Target. The Advisory Group recommends an 80 percent reduction below 2005 levels by 2050.
 - 1.1.3 The Advisory Group also recommends that the targets be revisited and adjusted from time to time based on future scientific findings, technology developments, and program results, and recommends the establishment of a mechanism to conduct this review as provided for in 7.0.

2.0 PROGRAM SCOPE

- 2.1 Sectors and Fuels. The Advisory Group recommends that the program cover the following sectors:
 - 2.1.1 Electricity generation and imports.
 - 2.1.2 Industrial combustion sources.
 - 2.1.3 Industrial process sources, provided that credible measurement & monitoring protocols exist or can be developed.
 - 2.1.4 Fuels serving residential, commercial and industrial buildings not otherwise covered in 2.1.1 or 2.1.2 above. Manitoba will include these fuels beginning in the second compliance period.
 - 2.1.5 Transportation fuels. Manitoba will include these fuels beginning in the second compliance period.
- 2.2 Biomass, Biofuels and Biogenic Emissions Exemptions. The following sources of emissions are exempted within the sectors otherwise covered in 2.1:
 - 2.2.1 Carbon dioxide emissions from the combustion of biomass or biofuels, or the proportion of carbon dioxide emissions from the combustion of biomass or biofuels in a blended fuel, are not included in the cap-and-trade program, except for purposes of reporting.

2.2.2 Biogenic emissions of carbon dioxide from industrial fermentation processes used in the production of some biofuels, beer and distilled spirits, pharmaceuticals and other products, shall be treated as carbon neutral, except for reporting purposes. However, emissions from fuels used to provide process heat for fermentation, and to otherwise enable and support the manufacture of such products, remain subject to program coverage in 2.1.

2.3 Greenhouse Gases. The program should cover the following greenhouse gases, as appropriate: carbon dioxide, methane, nitrous oxide, hydro-fluorocarbons, perfluorocarbons, and sulfur hexafluoride. *De minimus* emissions should be excluded.

Carbon dioxide emissions from the combustion of biomass or biofuels, or the proportion of carbon dioxide emissions from the combustion of biomass or biofuels in a blended fuel, are not included in the cap-and-trade program, except for the purposes of reporting.

2.4 Points of Regulation. The following are the recommended points of regulation for each sector:

2.4.1 For electricity, the first deliverer of electricity, subject to resolution of legal issues: for electricity generated within participating jurisdictions for sale, the first deliverer is the generator of that electricity; and for electricity generated outside the participating jurisdictions, the first deliverer is the entity that first delivers the electricity into a participating jurisdiction for consumption in a participating jurisdiction.

2.4.2 For industrial combustion emissions, the emissions' sources.

2.4.3 For industrial process emissions, the emissions' sources.

2.4.4 If transportation fuels are included, where the fuels enter the market in the participating jurisdictions; generally at the terminal rack, final blender or distributor.

2.4.5 For residential, commercial and industrial combustion emissions not covered at 2.3.1 and 2.3.2, where the fuels enter the market in the participating jurisdictions; generally at the terminal rack, final blender or distributor.

2.5 Threshold for Coverage. Entities with annual emissions of 25,000 metric tons or more shall be subject to the program on a once-in, always-in basis, provided: electric generating units with a capacity of less than 25 megawatts should be exempt and combustion units that burn 100 percent biomass should be exempt for carbon dioxide

emissions only. Annual emissions shall be calculated using a three-year rolling average.

- 2.6 Cap-and-Trade Reductions. The reduction to be achieved by covered sectors should be proportionate to their share of total emissions, provided that, together with complementary policies, the program achieves the recommended reduction goal set out in 1.0. The program will ensure that all sectors contribute equitably to achieving the regional reduction target.
- 2.7 Complementary Policy Reductions. The recommendations on the scope of the cap-and-trade program assume that other policies will be implemented for covered and non-covered sectors to supplement the program and to ensure that comparable reductions will be achieved in non-covered sectors so that, taken together, the cap-and-trade program and the other policies will achieve the regional goal equitably across the economy.
- 2.8 Linking.
 - 2.8.1 The Advisory Group recommends that the participating states and province seek to link the Accord to the:
 - 2.8.1.1 Northeast Regional Greenhouse Gas Initiative covering ten northeastern and mid-Atlantic states;
 - 2.8.1.2 Western Climate Initiative, covering seven western U.S. states and four Canadian provinces;
 - 2.8.1.3 European Emissions Trading System; and
 - 2.8.1.4 Other mandatory greenhouse gas reduction programs as appropriate.
 - 2.8.2 As part of this evaluation, in accordance with 4.3, the participating states and province should consider whether to accept offsets approved under the Clean Development Mechanism and Joint Implementation programs. In so doing, participating states and provinces should consider:
 - 2.8.2.1 The extent to which those offsets meet the Offset Requirements in 4.2; and
 - 2.8.2.2 Whether or not offsets approved under the Clean Development Mechanism and Joint Implementation programs are accepted under the programs linked to under 2.7.1.
- 2.9 Midwestern Design and Possible Federal Programs. This proposed program is designed to stand alone, provide a model for, or enable transition to or harmonization with programs that could emerge

from the federal governments of the United States and Canada. The jurisdictions should promote and influence federal GHG emission reduction programs that are consistent with the above design principles, and ensure those programs translate into absolute GHG reductions. In the event this Midwestern program issues allowances before a federal program in Canada or the United States, the jurisdictions should work to ensure that those allowances are fully recognized and valued in the operation of a federal program.

3.0 ALLOWANCES

- 3.1 State and Provincial Allowance Budgets. Apportionment refers to how the total regional allowance budget is divided into Participating Jurisdictions' allowance budgets.¹ The Advisory Group recommends that the state and provincial allowance budgets should be established based primarily on absolute emissions allowed in each state and province, calculated in a uniform manner. Some portion of the state and provincial allowance budget may be apportioned based on other criteria, such as GHG emissions per capita; baseline year for allocation (i.e. adjustments to allow reward for early action); population and economic growth in the Participating Jurisdictions; and new sources or projected new sources.
- 3.2 Reduction Path. Allowance apportionment will decline in line with the targets trajectory over time.
- 3.3 Allowance Distribution: Purposes. Allowance value should be put toward climate-related purposes, not other purposes, with a focus on the Midwest's special challenges as a coal-dependent region with a significant energy-intensive industrial base faced with global competition.

The program will entail a significant economic transition. The Advisory Group recognizes the need to mitigate the costs and maximize the benefits associated with this transition. Climate-related purposes include three categories: (1) accelerating transformational investment; (2) mitigating transitional adverse impacts of the program, and (3) addressing harmful impacts due to climate change. These recommendations are made on the assumption that strong complementary policies are enacted and funded outside of the cap-and-trade program.

¹ This is distinct from allowance distribution, which describes how jurisdictions choose to distribute their share of allowances into the market.

- 3.3.1 *Accelerating Transformational Investment.* Allowance value should be distributed to accelerate:
 - 3.3.1.1 Commercial development and deployment of low-carbon technologies, infrastructure, and strategies primarily for sectors covered by the cap and trade program. Distribution should be especially focused on those initiatives covered by the MGA platform, with emphasis on the recommendations of the MGA Platform Advisory Groups, and where potential GHG emissions reduction benefits are substantial and/or a lack of funding is a key barrier to success.
 - 3.3.1.2 The revitalization, retooling, conversion, and/or re-use of existing industrial and manufacturing infrastructure in the Midwestern region, including the transportation sector.
- 3.3.2 *Mitigating Transitional Adverse Impacts:*
 - 3.3.2.1 Consumers:
 - 3.3.2.1.1 Allowance value should be used to mitigate cap and trade program cost impacts to end users (particularly low-income consumers, energy intensive industry, and other highly impacted sectors), including energy price impacts.
 - 3.3.2.1.2 The distribution of allowance value, together with related regulatory policies, should be used to minimize net cost increases to consumers by promoting investment in conservation and efficiency programs.
 - 3.3.2.1.3 Any allowance value a Participating Jurisdiction may put towards efficiency should be additional to, and not a substitution for, utility conservation and efficiency programs and complementary policies.
 - 3.3.2.2 Industry:
 - 3.3.2.2.1 Allowance value should be used to mitigate cap-and-trade program cost impacts (including energy price impacts) to industrial entities in the region,

particularly for those industries that are energy-intensive and have a limited ability to pass costs on to consumers of their products. Eligible industries should be determined based on analysis related to carbon-intensive energy purchased or generated, and GHG emissions.

3.3.2.2.2 Allowance value should be used to minimize net cost increases to these industries and their customers and/or support investment in low-carbon technologies and processes.

3.3.2.2.3 Allowance value should be used to ease worker and community transition.

3.3.2.2.4 Allowance value should be used to improve competitiveness of industry in the Midwest, and prevent leakage of emissions, jobs, and industry to regions outside of the area covered by the program.

3.3.2.3 Workers: Allowance value should be used to support robust regional worker training and educational programs that supplement or complement existing local, state/provincial programs and federal efforts.

3.3.3 *Mitigating adverse impacts of climate change on communities, human health, and natural resources.*

3.3.3.1 Allowance value should be used to:

3.3.3.1.1 Develop and implement comprehensive regional and jurisdictional climate adaptation strategies with a focus on adverse impacts on communities, human health, and natural resources.

3.3.3.1.2 Enhance scientific capacity of the Participating Jurisdictions to evaluate and address the impacts of climate change on fish, wildlife, and ecosystems.

- 3.4 Regional Distribution of Allowance Value, or by Jurisdiction. The Advisory Group recommends that some decisions over allowance distribution should be left to each Participating Jurisdiction, while other decisions should be harmonized across Participating Jurisdictions.

The Advisory Group recommends that the Participating Jurisdictions seek to achieve a high level of harmonization and consistency across Participating Jurisdictions in order to minimize inter-jurisdictional economic competitiveness issues and ensure a level playing field. The Advisory Group also encourages the Participating Jurisdictions to reserve a portion of allowance value to be used for key regional and sub-regional programs that will benefit the region as a whole or a subset of the Participating Jurisdictions.

Putting some allowance value towards joint support of multi-jurisdictional efforts central to facilitating the regional transition to a prosperous low carbon economy will help ensure the transition is expedited, costs are minimized, and the region can reap maximum economic and jobs benefits. In particular, the Advisory Group encourages the Participating Jurisdictions to support the following programs with allowance value on a region-wide or sub-regional basis:

- 3.4.1 *Regional Low-Carbon Technology Commercialization Fund.* The Accord Advisory Group recommends establishment of a competitive regional fund that is supported by allowance value in order to foster low-carbon technology demonstration, deployment and commercialization based on the shared technology priorities of this Advisory Group and the three MGA Platform Advisory Groups. The fund would:

- 3.4.1.1 Ensure availability of investment funding needed under a cap-and-trade program;
- 3.4.1.2 Maximize regional coordination of R&D efforts, including coordination among research universities, and help attract capital investment to the region;
- 3.4.1.3 Award funds to projects based on a reverse auction or other cost-effective mechanism to maximize the performance of the overall investment portfolio and achieve the longer-term reduction goals of the cap and trade program.²

² Under a reverse auction, project bidders commit to certain operational outcomes at a particular price based on the established performance criteria of the auction.

- 3.4.1.4 Provide for separate auctions within the overall fund in order to allow commercially riskier projects (e.g. higher levels of CO₂ capture or less tested technologies) to compete for support based on different performance and eligibility criteria.
- 3.4.1.5 Support demonstration, deployment and commercialization of technologies relevant to MGA Platform priorities³.
- 3.4.1.6 Sources of Fund Revenues. The fund may initially be supported using revenues from a sector-specific or broader fee mechanism. With commencement of the program, the fund should be supported allowance value obtained through allowance auction revenues and allowance allocation fees, as described in section 3.5.2.1.
- 3.4.1.7 Awarding of funding. Successful projects would receive fixed annual performance-based payments based on appropriate measures applicable to each technology type to be determined by the Participating Jurisdictions.⁴
- 3.4.1.8 Program Management. The jurisdictions would jointly manage the fund consistent with the cap-and-trade program design principles, including developing appropriate funding categories, mechanisms and amounts, deadlines, eligibility and performance criteria. The Participating Jurisdictions would establish and revise technology goals based on the evolving status of emerging technologies and emissions reductions needs in different sectors, and the availability of alternative sources of technology funding.

³ These may include 1) CCS technologies; 2) advanced biomass conversion technologies for biomass to liquids, SNG, and power; 3) other advanced efficiency, grid efficiency, and low-carbon energy technologies; 4) combined heat and power applications in the electric power and industrial sectors; 5) electricity storage; and 6) advanced low-carbon transportation technologies, including low-carbon fuels, advanced vehicle batteries, and others. While separate reverse auction criteria may be used for each of these high-priority technology areas, the Participating Jurisdictions should also consider how the regional fund can be leveraged to strengthen links between sectors, such as the utility and transportation sector, by targeting cross-cutting technologies or infrastructure.

⁴ These may include payments per ton of CO₂ sequestered (for technologies and projects involving CO₂ capture and storage) or MWhrs of electricity or BTUs of liquid fuels, syngas or SNG produced for renewable or near zero-carbon energy projects.

3.4.2 *Suggestions for Other Regional or Sub-regional Funds and Priorities.* In order to efficiently and effectively implement the Accord's GHG reduction goals and meet the objectives of the MGA Platform, and where other sources of private or federal funding are not deemed sufficient, the Advisory Group encourages regional and/or sub-regional cooperation, using allowance value for the following initiatives, to be managed jointly by the Participating Jurisdictions. These include:

3.4.2.1 Capital attraction and innovation. Promotion of collaboration among the regions' universities, entrepreneurs, and policy-makers to attract capital for GHG-related research, technology development and innovation for the benefit of the region.

3.4.2.2 Workforce development. Cooperative efforts to assess the workforce and skills availability and needs in the region and address workforce development implications of the MGA Platform and Accord in ways that supplement and enhance existing workforce development programs.

3.4.2.3 Regional infrastructure. Addressing regional infrastructure needs required to meet the goals of the MGA Accord and Platform, such as a carbon pipeline, smart grid technology, and speeding adoption of plug-in hybrid vehicles and construction of high speed rail.

3.4.3 Harmonization: Decisions that should be harmonized across Participating Jurisdictions to the maximum extent possible include:

3.4.3.1 To the extent allowances are allocated, consistent procedures should be employed with the objective of minimizing intra-regional competitive concerns and anticompetitive outcomes.

3.4.3.2 Covered entity entrants to the cap-and-trade program should be treated similarly across all participating jurisdictions to the maximum extent possible.

3.4.3.3 The minimum percentage of allowances to be auctioned, for price discovery and to help ensure market liquidity in the early years of the program.

- 3.5 Allowance Distribution: Mechanisms. The Advisory Group recognizes that the decision on whether and how to auction or allocate allowances resides ultimately with the Participating jurisdictions and will depend on the purposes to be achieved through the allowance value. Accordingly, all numbers and percentages related to auction or allocation levels, or allocation fees, are suggestive and subject to jurisdictional discretion. However, the Advisory Group also makes the following recommendations to guide the Participating Jurisdictions in the design and implementation of a cap-and-trade system aligned with the design principles above in order to protect Midwestern interests and maximize environmental and economic benefits to the region.
- 3.5.1 Allowance Reserve Pool for Cost Containment. The Advisory Group recommends that 2 percent of each Participating Jurisdiction's allowances be allocated each year to an Allowance Reserve Pool. The Allowance Reserve Pool will be administered by the Participating Jurisdictions with the aid of the Market Advisory and Cost Containment Committee (MACCC) to prevent excessively high or low allowance prices as detailed in Section 8.0 below.
- 3.5.2 Protection of Allowance Value, Accountability and Transparency: The Advisory Group recommends that each Participating Jurisdiction establish strong legal mechanisms to safeguard allowance value, whether allowances are auctioned or allocated to ensure such value is not diverted to non-climate related purposes. Such mechanisms also should ensure that use of allowance value is transparent and carefully monitored, that entities receiving such value are held accountable for allowance value use for the purposes intended, and that market manipulation is prevented and speculation minimized.
- 3.5.3 Prevention of windfall profits. The Advisory Group recommends that each participating jurisdiction establish mechanisms for each covered sector to prevent windfall profits being realized as a result of the Program.
- 3.5.4 Distribution of Allowance Value through Auctions and Allocations: The Advisory Group recommends a hybrid approach to allowance distribution. It should combine auctions to provide a robust allowance market with price discovery and sufficient liquidity, as well as funding for needed programs, together with allocations to covered entities at modest fixed fees to limit allowance cost and volatility risks and also to provide additional funding for

climate-related purposes. This hybrid approach should apply during the first three compliance periods (the “Transition Period”), after which a transition to full auction of allowances should take place within the following three compliance periods. These recommendations are as follows:

3.5.4.1 Region-Wide Initiatives. Of the total pool of available allowances each year based upon the cap, a percentage, such as 5 percent, would be retained before assignment to the Participating Jurisdictions and sold in a regional auction with the proceeds invested in the proposed Low-Carbon Technology Commercialization Fund (the Technology Fund), or such other region-wide initiatives to which the Participating Jurisdictions agree, in order to facilitate, and lower the cost of, compliance with the cap over the long term for the affected sectors. The Participating Jurisdictions may agree to provide supplementary funding to the Technology Fund, and other regional or sub-regional programs, from their other auction and/or fee revenues.

3.5.4.2 Sector Distribution. Allowance distributions to covered sectors should be based on the proportionate GHG emissions of each sector as follows:

3.5.4.2.1 Transportation Sector. In general, the allowances assigned to each Participating Jurisdiction for the transportation sector should be auctioned through a regional auction process, with the proceeds to be used by each Participating Jurisdiction to fund initiatives that (i) mitigate cost impacts of the cap-and-trade programs for transportation users, (ii) reduce transportation GHG emissions through means such as improvement of mass transit infrastructure, improved transportation and land-use planning, enhanced implementation of low-carbon vehicle and fuels technologies and infrastructure, (iii) provide work force development and (iv) implement climate

adaptation strategies. The Participating Jurisdictions would have discretion as to selection and prioritization of cost mitigation measures, transportation GHG reduction strategies, work force training and development, and adaptation. The Participating Jurisdictions as a whole, or a sub-regional group of participants, are encouraged to use a portion of these revenues for regional, or sub-regional, joint transportation initiatives.

If the jurisdiction determines in advance of allowance distribution that certain classes of covered entities in the transportation sector are unable to pass through all or some portion of the cost of allowances to customers, and will be harmed substantially as a result, a Participating Jurisdiction would have discretion to allocate allowances to such entities. Any entity that receives such an allocation must certify that the value of the allowances received will be used only to cover net costs of compliance and not lead to windfall profits. Such certification shall be subject to audit. Any allowances allocated to this sector would be subject to the same fee structure as utility allocations as described below.

3.5.4.2.2 Utility Sector (including emissions from buildings).⁵ Some percentage, such as 5 percent, of each Participating Jurisdiction's annual allowance budget attributable to the utility sector would be allocated to the regional Technology Fund (see 3.5.3.1). During the transition period, an additional percentage of the allowances for this sector, such as 5 percent, would be auctioned, with the proceeds to be used by Participating Jurisdictions as discussed below. The remaining allowances

⁵ For purposes of this proposal, the term "regulated utility" includes municipal utilities and rural electric cooperatives that are not state regulated. They would be legally obligated to utilize the allowance value allocated for the purposes specified.

assignable to this sector would be allocated to regulated utility entities within each Participating Jurisdiction. These entities would include gas LDCs, electric load-serving entities in regulated states and electric distribution companies in deregulated states. Mechanisms to achieve this objective would have to be established for unregulated heating fuels such as propane and oil and for purchasers of natural gas that bypass the LDCs. Allocations to entities in this sector would, unless contrary to a Participating Jurisdiction's laws, be based upon an average of the most current three years' of historic emissions associated with the supply used by them to serve, or delivered by them, to end users, using a standard regional protocol.

These allocations would not be free, but would be provided at a modest fee. Regarding the setting of fees, the participating jurisdictions should balance the program funding needs with the impacts on covered entities and consumers. The funds collected through these fees and auction proceeds from this sector would be available for each Participating Jurisdiction to use in its discretion for energy cost mitigation for consumers, GHG reduction initiatives for the sector and/or climate change adaptation. How this requirement would be accomplished would be determined by the Participating Jurisdiction's regulatory body or bodies within each jurisdiction, and would likely vary depending upon the Participating Jurisdiction's energy costs and complementary programs. The Participating Jurisdictions' regulatory bodies with oversight would oversee the use of allowances distributed to the sector for identified purposes, including mitigating energy costs for consumers directly or

through implementation of low income weatherization and other conservation and efficiency programs. The Participating Jurisdictions may agree that a portion of these revenues would go to regional or sub-regional projects.

In no event should any of the value of the allowances allocated to this sector be permitted to flow to utility stockholders. Participating Jurisdictions may approve plans consistent with their rules allowing funds to be retained for use locally for permitted purposes by municipals and cooperative utilities not otherwise subject to regulation by a jurisdiction.

3.5.4.2.3 Merchant Power Sector. In determining Participating Jurisdictions' allowance budgets, the emissions of the merchant power sector should be counted as utility sector emissions except to the extent that allocations of allowances are made pursuant to this section, but there should be no double counting. Merchant power plants are unregulated and, in general, should be able to pass through all, or a substantial portion, of their allowance costs. However, each Participating Jurisdiction would have discretion to allocate a portion of such allowances to merchant coal power plants in their jurisdiction if the jurisdiction determines in advance that all or a portion of such allowance costs cannot be passed through to the customers of a particular category of merchant plants. (A corresponding amount of the Participating Jurisdiction's emission allowance budget should be transferred from the utility sector to the merchant sector to match any allocations to merchants under this section in order to prevent over allocation.) Any merchant that receives an allocation in this way should be required to certify that the value of the allowances it receives will be used to lower the cost of the power to

purchasers supplied by the merchant from the plant at issue, used to mitigate the costs of compliance for Midwestern facilities, or invested in low-carbon technologies in the region. Such certification should be subject to audit for the specified purposes and to detect and prevent windfall profits.

Any allowances allocated to merchant plants would be subject to the same fee structure as utility allocations. Auction and fee revenues from this sector would be available for use by the Participating Jurisdictions for GHG reduction and climate change adaptation purposes in the same way utility sector revenues would be available.

3.5.4.2.4 Industrial Sector (direct emissions). The allowances assigned to the Participating Jurisdictions for the direct emissions from combustion and industrial processes (as opposed to emissions associated with energy purchases or transportation use) of this sector would, unless contrary to a Participating Jurisdiction's laws, be allocated to covered industries based on a three-year average of historical emissions, using the most current three years of emissions data, with a focus on energy intensive industry as set forth in Section 3.3.2.2. In the early years of the program, such as during the first two compliance periods, all of the allowances that each Participating Jurisdiction receives for direct industrial emissions, minus whatever percentage of these allowances is initially reserved for the Technology Fund (see 3.5.3.1), would be allocated rather than auctioned (for example, if 5 percent of each jurisdiction's allowance budget is reserved for the Fund, then 95 percent of the allowances it received for direct industrial emissions would be allocated)., During the third compliance period, the allocation would be reduced to a slightly lower level,

such as 90 percent, and a small percentage of allowances, such as 5 percent, would be auctioned, as in the case of the utility sector. Starting in the fourth compliance period, allowance distribution to this sector would gradually transition to full auctioning in accordance with the transition described in 3.5.4.

The same fee structure for allocations would apply to the industrial sector as applies to the utility sector. The funds realized by each Participating Jurisdiction through fees and auction revenues from this sector would be available for use by each Participating Jurisdiction to fund GHG reduction strategies for the sector, work force development and training and industrial modernization.

To receive an allocation of allowances under the program, a company would be required to certify that the value of allowances received by it will be used, consistent with the purposes set forth in Section 3.3.2.2, to improve the competitiveness of its facilities within the Midwest directly or through investments in the Midwest that will lower the costs of compliance. In other words, industry should represent that the value will not flow to operations outside the region. Such certification would be subject to audit for the specified purposes and to detect and prevent windfall profits.

3.5.4.2.5 Combined Heat and Power. The cap-and-trade program should not discriminate against combined heat and power, and Participating Jurisdictions may use allowance value to provide specific incentives for combined heat and power applications that reduce greenhouse gas emissions and increase energy efficiency.

3.5.4.3 Post-Transition Period Auctions. Free and fee-based allocation of allowances should not be

permanent, and a transition to a full auction-based distribution should occur beginning in the fourth compliance period. This transition to full auctioning should be complete by the end of the sixth compliance period. The transition should be overseen by the Regional Administrative Organization and be subject to evaluation of impacts on covered entities, consumers, and the state of development of low-carbon technologies. Adjustments to the fee for allocated allowances also may be made.

3.6 Compliance Period. A compliance period is the length of time for which covered sources must submit allowances equivalent to their emissions, or face a penalty for failing to do so. The Advisory Group recommends that each compliance period should be 3 years in length.

3.7 Banking. The Advisory Group recommends that the cap-and-trade program should allow unlimited banking of allowances and offsets credits. Allowances or offsets received or purchased in one year, therefore, can be banked and used in any subsequent year of the program.

3.8 Borrowing. The Advisory Group recommends that limited borrowing should be allowed from no more than two years beyond the end of the current compliance period, provided borrowed allowances should be paid back with some “interest”.

Early Action Credit. The Advisory Group recommends that early action should be recognized in the cap-and-trade program by allowing each Participating Jurisdiction to use a portion of its allowance budget allocated to each covered sector to reward early action by entities in the sector, using a consistent region-wide cut-off date for early action to be agreed upon by the Participating Jurisdictions.

4.0 OFFSETS

4.1 Offsets Program. The Advisory Group recommends that the states and province develop an offsets component as part of the cap-and-trade program.

4.2 Offsets Requirements. Offsets must be real, additional, verifiable, permanent, and enforceable so that they do not compromise the integrity of the cap-and-trade program:

- 4.2.1 *Real*. Offsets must represent actual emission reductions and not artifacts of incomplete or inaccurate accounting. The effects of a project on GHG emissions must be comprehensively accounted for, and “leakage” in emissions must be factored into the quantification of emission reductions. Conservative assumptions should be used where there are uncertainties in quantifying emission reductions or removals.
- 4.2.2 *Additional*. The reductions resulting from offset projects must be shown to be “in addition to” reductions that would have occurred without the incentive provided by offset credit. To be eligible for offsets, offset projects cannot be required by law or regulations, and must exceed baseline criteria. The baseline should use standardized criteria (including but not limited to, performance standards, financial feasibility criteria, market penetration, and project start date) that serve to exclude “business as usual” projects from eligibility.
- 4.2.3 *Verifiable*. Offsets must result from projects or programs whose performance can be readily monitored and verified, and whose effects can be measured with reasonable precision and certainty.
- 4.2.4 *Permanent*. Emission reductions or removals must be backed by guarantees if they can be reversed, i.e., re-emitted to the atmosphere. For emission reductions or sequestration activities that can be reversed, adequate safeguards should be established to minimize the risk of reversal, or a mechanism should be provided for the replacement of those tons.
- 4.2.5 *Enforceable*. Offsets must be consistent with regulations and administrative rules that define their creation, provide for transparency, and meet defined standards of ownership to avoid double counting.
- 4.3 Regional Coordination and Reciprocity
 - 4.3.1 The offsets program must be consistently implemented from jurisdiction to jurisdiction. All offset protocols used by participating jurisdictions should be reviewed and approved through a regional process. The Regional Administrative Organization established in 7.2 should help jurisdictions evaluate project types, offset protocols [and offset registries]. Each participating jurisdiction reserves the right to select the regionally approved offset protocols for which it will provide application support, review and approval.

- 4.3.2 Offsets awarded by any participating jurisdiction should be eligible in every other participating jurisdiction.
- 4.4 Offset Protocol Development. The offset program should employ standards-based protocols to reduce the administrative burden of the program, and improve certainty for project developers. Initial offset project categories and evaluation protocols should be established before program launch. The following mechanism should be used to establish this initial list, and to incorporate additional categories and evaluation criteria over time.
- 4.4.1 Category evaluation and protocol development should be spearheaded by strong technical and scientific advisory committees.
- 4.4.1.1 Technical Committees would be established for each offset category being considered by signatory states and provinces. Technical Committees would be comprised of subject matter experts and would be tasked with drafting offset project protocols. The Technical Committees should report their findings to the Scientific Committee.
- 4.4.1.2 The Scientific Committee is a standing body of scientists and experts with an in-depth understanding of climate science and offset program principles and implementation challenges. The Scientific Committee can accept, reject, or suggest modifications to the Technical Committees.
- 4.4.1.3 In developing those protocols, the Technical and Scientific Committees should uphold the Offset Program Design Principles, Carbon Offset Requirements, and other guidelines agreed to by the signatory states and provinces.
- 4.4.1.4 In developing those protocols, the Technical and Scientific Committees should consider protocols developed by other regulatory programs and voluntary registries.
- 4.4.2 In the interest of promoting transparency, protocols approved by the scientific committee should be made available for public comment.
- 4.4.3 Agency Heads of participating states and provinces would collectively consider, through a collaborative process, those

public comments when deciding whether or not to adopt a protocol throughout the region.

- 4.4.4 At any time, anyone may propose protocols for new types of projects to the regional organization, for consideration pursuant to the procedures in 4.4.
- 4.4.5 Protocols for quantification of emission reductions/removals and for project monitoring should be as standardized to the extent possible, while ensuring accuracy. Ideally, there should only be one approved protocol for each type of project, but additional protocols may be adopted if warranted.
- 4.4.6 *Offsets Types.* Initial project categories should be identified and prioritized for protocol development under section 4.4 to the extent that they meet the following criteria:
 - 4.4.6.1 Offsets easily and credibly meet the Offset Program Design Principles and Carbon Offset Requirements;
 - 4.4.6.2 Offsets can incentivize new technologies or new practices;
 - 4.4.6.3 It is likely that a project category would be unregulated under a Midwestern cap-and-trade program, or by complementary policies developed through the Greenhouse Gas Accord process;
 - 4.4.6.4 It is likely that a project category would be unregulated under a federal cap-and-trade program;
 - 4.4.6.5 There is stakeholder support for project categories;
 - 4.4.6.6 There is a high quantity of cost-effective reduction opportunities;
 - 4.4.6.7 There are environmental and economic co-benefits;
 - 4.4.6.8 Protocols already exist that employ standardized benchmark criteria for evaluating project categories; and
 - 4.4.6.9 There is administrative simplicity for project developers and jurisdictional regulators.

- 4.5 Limits on Use of Offsets. The use of offsets by covered entities should be limited to 20 percent of each covered entity's compliance obligation.
- 4.6 Geographical Location of Offsets.
- 4.6.1 In the initial compliance period, the geographic scope should be constrained to the Accord signatory jurisdictions and those states and provinces that have entered into a Memorandum of Understanding (MOU) with the Accord signatory jurisdictions.
- 4.6.1.1 At a minimum that MOU should require the state or province to carry out certain administrative tasks related to evaluation of offset projects.
- 4.6.1.2 States and provinces not a part of the Accord could also be required to have a GHG regulatory program of comparable or greater stringency than that established by the Accord.
- 4.6.1.3 Participation of international offsets beyond the U.S. and Canada is to be determined.
- 4.6.2 As the program evolves, states and provinces should consider, in accordance with 4.3, allowing for the participation of international offsets beyond the U.S. and Canada through the Clean Development Mechanism (CDM) and Joint Implementation (JI) programs. This determination should consider the results of the linkage evaluation pursuant to section 2.7, and the Offset Requirements in section 4.2.
- 4.6.3 Any determination about whether to allow offset credits from other regulatory offset programs should follow the procedures for adding offset project categories. Such decisions should be made by jurisdictions after thorough consideration by the Technical and Scientific Committees and public comment.
- 4.6.4 The limits on offsets use by covered entities and the geographic restrictions on offsets should be subject to review and adjustment by the Participating Jurisdictions with the assistance of the Regional Administrative Organization based on experience with the offsets program, including the jurisdictions' comfort level with offsets and the availability of offsets that meet the protocol requirements and the cost-containment needs of the program.
- 4.7 Offsets Project Review.

- 4.7.1 To maximize certainty for project developers, a two-step review process should be adopted for individual projects. The first step – a consistency determination – provides for preliminary review before project commencement. The second step – monitoring and verification – is the application for offset allowances equal to the actual emissions reductions or sequestrations demonstrated to have occurred at the project location.
- 4.7.2 Applications must be verified by accredited, independent, third-party verifiers.
- 4.7.3 Third-party verified applications must be reviewed by states or provinces.
- 4.7.4 To ensure rigor, periodic auditing should be performed consistently.
- 4.7.5 The regional offset program should be consistently implemented from jurisdiction to jurisdiction.
- 4.7.6 Project applications should be filed in accordance with the following guidelines:
 - 4.7.6.1 For an offset project located in one participating jurisdiction (in whole or in part), the consistency application must be filed with the appropriate regulatory agency in that jurisdiction.
 - 4.7.6.2 For an offset project located wholly outside all participating jurisdictions, the consistency application may be filed with the appropriate regulatory agency in any one participating jurisdiction, provided a copy of the consistency application is also filed with the cooperating regulatory agency in the jurisdiction where the offset project is located.
 - 4.7.6.3 For an offset project located in more than one participating jurisdiction, the consistency application must be filed in the participating jurisdiction where the larger part of the CO₂ equivalent emissions reduction or carbon sequestration due to the offset project is projected to occur.
 - 4.7.6.4 If the jurisdiction of primary location does not provide services for a particular offset category, a project may apply to any jurisdiction that provides such services.

- 4.8 Early action offset projects should be provided allowances from under the cap provided that their integrity is comparable to offsets approved under the MGGRA program.

5.0 MANDATORY EMISSIONS REPORTING

- 5.1 Start Date. Mandatory reporting of emissions for the six families of greenhouse gases included under the cap (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) will commence one year before the program start date as stipulated in 7.1, with data collection beginning two years before the start date.
- 5.1.1 Prior to the start of the mandatory reporting program, the Accord jurisdictions will establish the essential requirements for reporting by all entities and facilities required to report in each Accord jurisdiction. The jurisdictions should avoid duplicative state/provincial and federal reporting requirements.
- 5.1.2 For purposes of converting emissions to CO₂e, it is recommended that the values listed in the GWP table contained in The Climate Registry (TCR) General Reporting Protocol, Version 1.1 be used.
- 5.2 Threshold for Reporting. The entities and facilities subject to reporting are:
- 5.2.1 Electric generating units and other entities within covered sectors that have annual emissions equal to or greater than 20,000 metric tons of CO₂e. This includes all entities included under the cap as well as some below the cap threshold.
- 5.2.2 Level of Reporting Required. Only direct, stationary combustion and process emission sources are required to report. Sources within a facility with minimal contribution to the facility's emissions profile may be exempted from reporting.
- 5.2.3 Data collected in any one jurisdiction will be made available to all Accord jurisdictions, as appropriate, given confidentiality concerns.
- 5.2.4 Nothing in the Accord program design would limit any state or province's discretion to require reporting earlier, at lower thresholds, or for entities not covered by the cap-and-trade program.

- 5.3 Reporting Authority. The Advisory Group recommends using the Climate Registry Information System (CRIS) (hosted and managed by TCR), modified to support mandatory reporting subject to verification and auditing, to collect and manage the Accord's regional database of emissions information. In addition, jurisdictions may use the CRIS Common Reporting Framework to meet their individual jurisdictional database needs for emission collection, verification, and compliance.
- 5.4 Costs will be taken into account when considering verification requirements.

6.0 COMPLIANCE AND ENFORCEMENT RECOMMENDATIONS

- 6.1 Each participating jurisdiction will retain and/or enhance its regulatory and enforcement authority and responsibilities to enforce compliance with the cap-and-trade program within its own jurisdiction.
- 6.2 Each covered entity or facility will demonstrate compliance with the cap-and-trade program by surrendering sufficient allowances following the end of each compliance period. To ensure transparency and maintain public confidence, data not subject to confidentiality from emissions reports, allowances, and offsets that are used for compliance will be made public in a timely manner.
- 6.3 If by the deadline for demonstrating compliance a covered entity or facility does not have sufficient allowances to cover its emissions for the previous compliance period, it shall be required to surrender [XX allowances and/or \$YY] for every metric ton of CO₂e not covered by an allowance at the deadline. This does not preclude other penalties allowed under individual state or provincial laws.
- 6.4 The Accord jurisdictions recognize that during the first compliance period, both they and the entities and facilities covered by the cap-and-trade program will likely encounter issues that arise in the implementation of any new program. Consequently, the Accord jurisdictions are committed to providing appropriate technical and other compliance assistance to the program participants.
- 6.5 The participating jurisdictions will ensure accounting systems are in place to prevent using allowances, tradable units, and offsets more than once for compliance.

7.0 PROGRAM IMPLEMENTATION, COORDINATION, AND REVIEW

- 7.1 Start Date: Upon adoption of the model rule and execution of an implementation MOU by the jurisdictions, the first compliance period for the cap-and-trade program will begin January 1, 2012.

7.2 A Regional Administrative Organization (RAO) will be established to reduce administrative costs, improve program transparency and consistency, provide market oversight and recommend cost containment measures to the jurisdictions. The RAO will include a Board staffed by representatives from each participating jurisdiction, and it may also employ additional staff. It will be a technical assistance organization only and will not have regulatory or enforcement authority itself. The functions the organizations may serve include:

- 7.2.1 Coordinate the regional auction of allowances;
- 7.2.2 Track emissions and provide public information on progress towards the Accord's regional goal;
- 7.2.3 Monitor and report on market activity, including any potential market manipulation;
- 7.2.4 Recommend cost containment measures;
- 7.2.5 Serve as a forum for Accord Partner jurisdictions to update one another on program progress;
- 7.2.6 Coordinate review and adoption of protocols for offsets;
- 7.2.7 Coordinate review and adoption of updated reporting protocols;
- 7.2.8 Coordinate review and issuing of offset credits and provide public information as appropriate;
- 7.2.9 Suggest criteria and means to accredit service providers to deliver validation and verification services;
- 7.2.10 Facilitate and coordinate periodic, comprehensive program reviews; and
- 7.2.11 Establish a low-income advisory group that makes recommendations regarding how to address impacts to low-income consumers and coordinates with existing jurisdictional and federal programs.

8.0 MARKET OVERSIGHT AND COST CONTAINMENT

- 8.1 Market Oversight. The jurisdictions will establish rules promoting sound markets, as well as preventing fraud and the exercise of undue market power.
- 8.2 Cost Containment. The jurisdictions will also provide for a flexible and adaptive cost containment framework that includes a desired allowance trading price range along with procedures and measures beyond those already otherwise provided for in these

Recommendations, such as the three-year compliance period, unlimited banking, limited borrowing across compliance periods, and early action credit. This cost-containment framework shall seek to maintain orderly operation of the allowance trading market, provide sufficient stability and predictability to meet long-term innovation and investment objectives of the Program, and avoid unanticipated consequences leading to market or Program failure.

8.3 Market Oversight and Cost Containment Committee (MOCCC). The jurisdictions will establish the MOCCC, staffed by the RAO described in 7.2, which will be responsible for making recommendations to the jurisdictions regarding both market oversight and cost-containment. The MOCCC will:

8.3.1.1 Establish an allowance trading price range that expands over time as experience with and confidence in the allowance market grows. The price range shall have multiple upper and lower price thresholds, the crossing of which will trigger the MOCCC to convene for deliberations and recommend graduated responses to the jurisdictions, suited to actual market conditions, such as:

8.3.1.1.1 If allowance prices are too high, expand allowance borrowing and offset limits.

8.3.1.1.2 Conversely, if allowance prices are too low, curtail allowance borrowing and tighten offset limits.

8.3.1.1.3 If allowance prices substantially exceed the expected range and threaten imminent market and/or Program failure, release allowances from the Allowance Reserve Pool, but only until such point that acceptable market conditions are restored.

8.3.1.1.4 Conversely, if allowance prices are substantially below the expected range and risk compromising the long-term incentive and investment objectives of the Program, withdraw allowances from the marketplace and place them into the Allowance Reserve Pool until such point that acceptable market conditions are restored.

8.3.1.2 The MOCCC will evaluate actual market conditions on a case-by-case basis when

allowance price thresholds are reached. However, the MOCCC will be required to make explicit recommendations to the jurisdictions regarding actions to be taken, if any. The MOCCC may recommend additional cost containment measures over time as appropriate.

8.3.1.3 In the event that allowances prices substantially exceed the expected range and the participating jurisdictions, with the assistance of the MOCCC, decide to release allowances into the marketplace to take corrective action, allowances will be released from the Allowance Reserve Pool. In the event that the Allowance Pool is depleted and allowances prices remain substantially higher than the expected price range, the jurisdictions may put into the Allowance Pool allowances from future compliance periods

8.4 Program Review. The cap-and-trade program will undergo, once in each compliance period, comprehensive review and revision, coordinated through the Regional Administrative Organization. This review will include a full assessment of the program, consistent with program design principles, and a determination of whether adjustments need to be made to the program based on its environmental results and market performance, as well as future scientific findings and technology developments. In particular, the review process will:

- 8.4.1 Review program emissions targets and trajectories;
- 8.4.2 Assess market prices, trends and economic impacts, including unanticipated price volatility, and consider revisions to cost containment measures;
- 8.4.3 Consider adjustments to program scope of coverage, thresholds for inclusion and/or reporting, and point of regulation;
- 8.4.4 Consider the inclusion of new partner jurisdictions;
- 8.4.5 Review compliance and enforcement provisions;
- 8.4.6 Review offsets protocols;
- 8.4.7 Review allowance distribution methodologies;
- 8.4.8 Review existing complementary policies, and consider whether additional complementary policies are required to help meet program goals; and

8.4.9 Recommend revisions for consideration by the jurisdictions.