

Specifications for 20 New Economic, Energy, and Climate Actions

Policy Options by Sector

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HEAT AND POWER

1. National Clean Electricity Standard

Policy Description

A Clean Electricity Standard (CES) is a policy that requires covered electricity retailers to supply a specified share of their electricity sales from qualifying clean energy resources. Electric generators would be granted clean energy credits for every megawatt-hour (MWh) of electricity they produce using qualifying clean energy sources. Utilities that serve retail customers would use some combination of credits granted to their own generation or credits acquired from other generators to meet their CES obligations. Generators without retail customers or utilities that generated more clean energy credits than needed to meet their own obligations could sell CES credits to other companies.

Goals and Timing

The policy targets clean energy generation equal to 45% of total generation by 2015, 47.5% by 2020, 50% by 2025 and 52.5% by 2030. To account for the relative GHG reduction benefits of different technologies the CES credits renewables and nuclear at 100% of MWh generation, efficient gas generation at 50%, coal fired generation with carbon capture and sequestration at 85%, and natural gas generation with carbon capture and sequestration at 90% of MWh generation. New renewable generation is ramped linearly from 7.5% of new installed generation capacity in 2015 to 15% in 2030. New nuclear includes loan guarantees for 6 GW currently in the pipeline, plus extended guarantees and other government actions to assure an additional 9 GW are added by 2030. Finally, an incentive of \$50 per ton of CO2 is offered starting in 2015 as an incentive for CCSR or enhanced oil recovery.

Financing Options

Higher allowable public service commission rate of returns for low carbon generating utility rate base/capital investments, moderate Incremental customer rate adjustments, pooled loan programs, cost sharing, loan credit enhancements (guarantees).

2. Incentives for Combined Heat and Power

Policy Description

Combined heat and power (CHP) systems reduce fossil fuel use and GHG emissions, both through the improved efficiency of the CHP systems, relative to separate heat and power technologies, and by avoiding transmission and distribution losses associated with moving power from central power stations located far from where the electricity is used. This policy is an incentive program to reduce the capital costs for industrial and commercial combined heat and power. Potential elements of this option include:

- Promotion of the use of gas-fired CHP systems
- Promotion of the use of biomass-fired CHP systems

Goals and Timing

The policy measure leads to a greater share of industrial process heat demand being met by CHP systems through incentivizes for higher efficiency CHP system configurations and industrial parks

designs which improve access to co-generated heat. The higher efficiency achieved through the use of otherwise waste heat reduces overall industrial fuel consumption GHG emissions.

Financing Options

Expansion of targeted pooled local fund, development of nonelectric renewable energy credit market that recognized advantages of biomass, energy contracts in which third party investor provides capital in exchange for portion of revenue from energy sales, tax incentives, public private cost sharing through grant programs.

RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL SECTOR

3. Industrial Process Efficiency and Demand Side Management Programs

Policy Description

Greenhouse gas emissions from industrial processes are substantial, forecasted at over 550 MMtCO2e in 2030. There are cost effective means available to reduce these GHG emissions through cost-effective energy efficiency measures and low energy intensity process improvements. Industrial process emissions of methane (CH4), nitrous oxide (N2O) and fluorinated compounds such as hydro fluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6) are also included.

This policy option also focuses on increasing investment in electricity and natural gas demand-side management (DSM) programs through programs run by utilities or others, energy efficiency funds, and/or energy efficiency goals. These options are typically termed DSM activities, and may be designed to work in tandem with other strategies that can also encourage efficiency gains. DSM programs cover all aspects of energy consumption, electricity and natural gas in buildings as well as industrial energy consumption.

Goals and Timing

This policy targets cost effective emissions reductions from the industrial sector using industrial process energy reduction cost curves developed for an inter-governmental lab report on process efficiency improvements. Limits to the cost-effective potential of these measures, which range from 5% to 15% by 2030, were estimated based on expert judgments on a sub-sector level for applications including electrochemical energy, machines drive, steam process heat and general facilities.

For DSM measures the policy targets cost effective energy efficiency investments in the industrial sectors. For industrial energy DSM, we target all cost effective energy efficiency identified in the report *Scenarios for a Clean Energy Future*, 2002. Industrial demand reductions equal 2.7% in 2010, 4% in 2015, 5.6% in 2020, 7.1% in 2025, and 8.6% in 2030.

Financing Options

Energy savings contracts in which third party companies share savings in return for investment, self-funding by facility owners encouraged through utility based financing (on bill financing) and preferential pricing for energy efficient processes.

4. Demand Side Management Measures for Commercial and Residential Electricity & Gas Use

Policy Description

Like industrial DSM programs described above, residential and commercial DSM programs are designed to improve energy efficiency and commercial processes through investment and installation of new technologies, combined with improved facility management practices. This includes electricity and direct fuel use for space and water heating and cooling, lighting, water supply and use, appliance and equipment operation, and other on site activities that involve energy use or production and service processes.

Goals and Timing

For DSM measures the policy targets cost effective energy efficiency investments in the buildings and facilities sectors. The targets for new natural gas DSM resources are equivalent to 2% of load in 2015, 4% in 2020, 6% in 2025, and 8% in 2030. The targets for new electricity DSM resources are equivalent to 2% of load in 2015, 6% in 2020, 10% in 2025, and 15% in 2030.

Financing Options

Utility based incentives (rebates) and preferential pricing structures for energy efficiency measures, utility financing programs (low interest loans and on-bill financing), development of secondary market for energy efficiency loans, public loan credit enhancements including subsidized interest rates and partial guarantees, white tag programs that create a market for verified energy savings, sustainable energy utilities that aggregate EE investments across among large groups of property owners.

5. High Performance Buildings

Policy Description

This policy provides incentives and targets to induce the owners and developers of new buildings to improve the efficiency of the use of energy and other resources in those buildings, along with provisions for raising target levels periodically and providing resources to building industry professionals to help achieve the desired building performance. This policy can include elements to encourage the improvement and review of energy use goals over time. Additionally, it can support flexibility in contracting arrangements to encourage integrated energy- and resource-efficient design, construction, and renovation.

Goals and Timing

The DSM activities were assumed to achieve a 15% reduction in commercial and residential electricity consumption by 2030, and an 8% reduction in commercial and residential natural gas consumption by 2030. Each started at a 2% reduction in 2015 and ramped up linearly to 2030.

Financing Options

Marketing effort to demonstrate and promote higher valuation of zero energy buildings compared with traditional building stock, local tax incentives, green mortgage development.

6. Appliance Standards

Policy Description

Appliance efficiency standards reduce the market cost of energy efficiency improvements by incorporating technological advances into base appliance models, thereby creating economies of scale. Appliance efficiency standards can be implemented for appliances not yet covered by federal standards, and to increase the stringency of existing federal standard efficiency requirements are appropriate. The Appliance Standards Awareness Project (ASAP) has developed a list of appliances that are likely candidates for improved standards.

Goals and Timing

Residential appliances include: refrigerators, central air conditioners, electric and geothermal heat pumps, room air conditioners, as well as kerosene, distillate, propane and natural gas furnaces. Commercial appliances include: oil and gas furnaces, T- 8 and other low efficiency florescent

lighting, supermarket display cases, as well as walk-in and reach-in freezers. We assume that all of the appliance standards take effect in 2015, and no further standard improvements are made subsequent to that.

Financing Options

Minimal incremental customer premiums, public private cost sharing such as rebates, utility financed incentives including rebates, preferential rate structures for customer energy efficiency monitored and controlled through smart meter technology.

7. Building Codes

Policy Description

Building energy codes specify minimum energy efficiency requirements for new buildings or for existing buildings undergoing a major renovation. Given the long lifetime of most buildings, mandating a national building code to include minimum energy efficiency requirements and periodically updating energy efficiency codes could provide long-term energy, economic and environmental benefits.

Potential measures supporting this option can include consumer education, improved enforcement of building codes, training for builders and contractors, and development of a clearinghouse for information on and to provide access to software tools to calculate the impact of energy efficiency and solar technologies on building energy performance. Such models could also support building codes as ENERGY STAR's Building Design Guidance, which is a strategic approach for improving energy performance in the building design process.

Goals and Timing

Annual efficiency improvement of 15.3% for electricity over baseline for new building consumption and 8.1% improvement for natural gas, LPG, and fuel oil beginning in 2015 and continuing through 2030.

Financing Options

Self funded through mandatory compliance, marketing effort to demonstrate and promote higher valuation of energy efficient buildings compared with traditional building stock, local tax incentives, green mortgage development.

TRANSPORTATION AND LAND USE

8. Vehicle Purchase Incentives

Policy Description

This policy looks at the impact of tax credits for high efficiency vehicles. The federal government currently offers a \$7,500 credit for electric vehicles (EVs) and plug-in hybrid vehicles (PHEVs). These credits serve to defray the upfront consumer cost of advanced technology vehicles, but the difference in price between conventional vehicles and EV/PHEVs will not disappear once they achieve greater market penetration. This policy examines the impact of maintaining a credit for EV/PHEVs through 2030, to defray some of the cost difference between these vehicles and the conventional gasoline-powered alternative. This policy offers significant economic, energy security and environmental benefits by shifting the light duty fleet away from predominantly imported gasoline/diesel and towards electric vehicles.

Goals and Timing

The existing federal credits for EV/PHEVs currently cover approximately 59% of the cost delta for these technologies, compared to conventional vehicles. This 59% figure comes from the portion of the cost delta between an EV/PHEV, which in covered by the current (\$7,500) federal tax credit for an EV/PHEV purchase. This 59% credit is held constant throughout the policy period, although the actual credit provided decreases as EV/PHEVs grow most cost competitive. The policy does not specifically prescribe a certain number of EV/PHEVs to be sold; the additional EV/PHEVs on the road are estimated in the MARKAL modeling.

Financing Options

Integration with air pollution quality credits, innovative life cycle leasing programs, tax incentives.

9. National Renewable Fuel Standard

Policy Description

This policy examines the economic, energy security and environmental benefits of increasing biofuel consumption beyond the existing Renewable Fuels Standard. Renewable fuels can provide economic benefits by producing fuel supplies domestically, which will create jobs in feedstock production, at biofuel facilities, and along the supply lines. There are also energy security benefits by providing domestic fuel resources for the transportation sector. Renewable fuels provide significant opportunities to reduce GHG emissions from the transportation sector if promoted in a way that emphasizes the reduction of GHG emissions on a life cycle basis.

Goals and Timing

This policy examines the period between the end of the latest Renewable Fuels Standard (RFS), which is 2022, and 2030. The policy seeks to increase biofuel consumption to match potential biofuel demand in the transportation sector. This assumes that all gasoline- powered vehicles sold after 2001 will run on E15, and that all biodiesel engines will run on B20. All additional ethanol production between 2022 and 2030 is assumed to be from cellulosic ethanol. This policy will result in a 71% increase from baseline biofuel consumption between 2022 and 2030, with the majority of this increase coming from biodiesel.

Financing Options

Self-funded, incremental consumer payments, production subsidization, carbon or clean energy pricing.

10. Smart Growth and Land Use

Policy Description

This policy focuses on the potential of smart growth to encourage denser development and therefore reduce vehicle miles traveled (VMT). Reducing VMT through denser development can have economic, energy security and environmental benefits, because VMT and fuel consumption are so closely linked.

More and more localities and states are turning to land planning and urban design for help in reducing automobile dependence. Many have concluded that roads cannot be built fast enough to meet travel demands induced by that road building and by the associated sprawling development patterns. Travel demand must be moderated.

Goals and Timing

Compared with a moderate increase in compact development, a 1.3% reduction in VMT is estimated in 2030. In the most aggressive policy, with higher rates of dense development, a 2.5% VMT reduction is estimated in 2030.

Financing Options

Locally implemented financial incentives including development fee (impact fees) incentives.

11. Public Transit

Policy Description

Improve existing transit service to generate greater use of public transit and a corresponding reduction in automobile travel. Fund enhanced promotion and marketing of transit to achieve greater use of public transit. Create new public transit infrastructure (light and heavy rail lines, and/or bus rapid transit routes), greater use of public transit, and reduction in automobile travel by expanding public transit infrastructure. This policy also seeks improvements through decreased travel times and a decrease in headways.

Goals and Timing

Double overall transit ridership by 2040 (as measured by passenger miles). Double planned spending on new starts and system improvements from 2010 to 2050. Decrease travel times by 33 percent by 2020. Decrease headway time by 33 percent by 2020.

Financing Options

Cost sharing between different levels of government and transit providers and employers, new and expanded polled loan programs that provide long term capital for eligible investments, loan credit enhancements, corporate partnerships in which industries that benefit (retailers, employers) share costs with transit providers, integration into air pollution regulation and trading programs in order to generate potential revenue for improved transit.

12. Anti Idling Technologies and Practices

Policy Description

Enforcing anti-idling ordinances and/or encouraging the use of alternatives to idling can reduce vehicle idling. Many states and local governments have adopted idling regulations for trucks and buses. Alternatives to long-term truck idling include the use of technologies, such as automatic engine shut-down/start-up systems controls, direct-fired heaters, auxiliary power units, and truck stop electrification. Auxiliary power units also represent a common alternative to switcher locomotives idling, and ocean-going vessels hoteling at the port can be reduced through the use of shore-power. The economic, energy security and environmental benefits of anti-idling primarily come from the potential fuel and monetary savings that can be achieved from reduced idling hours.

Goals and Timing

This policy seeks to reduce GHG emissions through the implementation of anti-idling technologies for trucks, ships, and locomotives. Implementation of the policy is assumed to build over time, throughout the 2011 to 2030 period. Two market penetration scenarios were studied: an "average growth" scenario which modeled a reduction of 10% of idling in 2011, going up to 100% reduction in 2030 (linear growth); a "rapid growth" scenario, in which 10% of idling was reduced in 2011 and a 100% reduction of idling was achieved in 2020.

Financing Options

Cost sharing, pooled loan programs, loan credit enhancements, corporate partnerships, and integration into air pollution programs.

13. Mode Shift Truck to Rail

Policy Description

Most freight shipment is undertaken by the private sector. Truck transportation is forecast to be the most common means of moving freight in America in 2030, but rail transport is more energy efficient. Whether goods move by rail, truck or other modes, private sector shipping decisions are based on the need to ship goods at the lowest possible cost within an appropriate time frame. Increasing use of the rail network can result in fuel savings, traffic reductions and energy security.

Goals and Timing

The TLU-6 option seeks to increase the rail ton-miles by 24% compared to the baseline by 2030. This 24% figure is based on the increase in ton-miles possible with an aggressive investment push, based on information from AASHTO's *Freight Rail Bottom Line Report*. A gradual ramp-up between 2011 and 2030 is assumed.

Financing Options

Continuation and expansion of large scale pooled loan programs such as financing authorities, public credit enhancements such as subsidized interests and partial guarantees.

14. National CAFE Standards Post 2025

Policy Description

The corporate average fuel economy (CAFE) standard is a federal policy, which requires automakers to meet certain average fuel efficiency standards each year for their vehicle fleet. The latest version of CAFE has released draft mileage standards through the year 2025. These standards are currently undergoing review and public comments. This policy examines the economic, energy and environmental impacts of continuing an aggressive CAFE standard through 2030. The economic benefits are primarily in the consumer savings from reduced fuel expenditures. There are energy security benefits because overall vehicle efficiency will improve, which will reduce the demand for gasoline and diesel.

Goals and Timing

This policy estimates the impacts of a strengthened CAFE standard to continue the trend of improvement in fuel economy through 2030. This trend implies a 21% increase in passenger car miles per gallon (mpg) and a 16% increase in light truck mpg.

Financing Options

Establishment of credit enhancements and preferential loan programs for eligible investments necessary, Life cycle leasing loan programs in which car financing takes into consideration energy savings.

AGRICULTURE, FORESTRY, AND WASTE

15. Crop Production and Nutrient Management Practices

Policy Description

There are a wide variety of practices that can be applied to crop production to achieve economic, energy, and environmental (3E) benefits. These range from new cultivation techniques, like no-till (NT) and conservation till (CT), to nutrient management approaches that reduce nitrogen (N) additions and upstream energy use. Other approaches include new technologies and practices to reduce other agricultural chemical usage, including pesticides; improved irrigation efficiency; conversion of cropland to pasture, herbaceous buffers, or wetlands; and implementation of energy efficiency and renewable energy projects on farm lands, among others. This mitigation option considers two different practice areas of crop production that can achieve significant 3E benefits and have been commonly selected in state-level planning projects.

AFW-1a. Crop Production Practices—Soil Carbon Management

The amount of carbon stored in the soil can be increased by adoption of such practices as NT/CT, reduced summer fallow, increased winter cover crops, and biochar application, among others. Use of CT/NT offers lower fuel consumption than conventional tillage, and over time, could offer lower equipment costs. Gains in soil carbon indirectly sequester carbon dioxide from the atmosphere, since the source of soil carbon is plant matter. By reducing mechanical soil disturbance, these practices reduce the oxidation of soil carbon compounds (releasing carbon dioxide back to the atmosphere). Other benefits include reduced soil erosion.

AFW-1b. Crop Production Practices—Nutrient Management

Improve the efficiency of commercial nitrogen-based fertilizers through implementation of best management practices and/or new technology. Significant cost savings can be achieved through lower fertilizations costs, which have increased significantly over the past 10-15 years. Increased crop yields are also possible through increases in nitrogen use efficiency. Also, ammonia is a primary nitrogen fertilizer or feedstock for production of other nitrogen fertilizers. Natural gas is the primary feedstock for manufacturing ammonia. Hence, reductions in nitrogen fertilizer use will also reduce upstream use of natural gas.

Excess nitrogen applied to soils and not metabolized by plants can be emitted to the atmosphere as nitrous oxide (N2O), leached into groundwater or surface water, or volatilized as ammonia. There are five general methods to increase nitrogen efficiency and lower N2O emissions. The first four of these are use of the right application rate, right product, right timing, and right placement (the "four R's"). A fifth method involves use of nitrification or urease inhibitors. Precision agriculture utilizes several new technologies that can address the four R's. These technologies include the use of variable rate fertilizer application, the global positioning system and remotely sensed data (satellite data), and yield monitors.

Goals and Timing

AFW-1a Soil Carbon Management - Achieve half of the potential identified by the Nicolas Institute T-AGG Study for conversion to no-till (NT) or conservation tillage (CT) by 2030; one-third of the converted management via no-till and two-thirds via conservation tillage. Areas targeted by the policy include the following USDA regions, since these are most likely to have soils and climate

offering the best soil C sequestration potential: Heartland, Eastern Uplands, Southern Seaboard, Mississippi Portal, and Prairie Gateway. Begin implementation in 2012 and achieve a linear progress toward the full goals of 7.2 million hectares of NT and 14.7 million hectares of CT adoption are achieved in 2030.

AFW-1b Nutrient Management - Address one-third of the potential area identified by the Nicolas Institute T-AGG Study for reducing N application rates by 2030; 75% of the acreage addressed through precision agriculture (PA) and 25% through the use of nitrification/urease inhibitors (NI).

Financing Options

Ecosystem service revenue systems that establish payments to farmers for the non-farming environmental services they provide. Cost sharing programs that take into consideration public benefits of improved practices. Integration and expansion of water quality pollution trading and regulation systems that generate revenue for innovative practices, cost sharing practices.

16. Livestock and Manure Management Practices

Policy Description

Methane emissions from livestock manure management at confined animal operations (e.g., dairies and swine operations) by installing anaerobic manure digesters. Methane energy from the manure digesters can be used to create power and/or heat, which offsets fossil fuel-based energy production and emissions. The joint U.S. Department of Agriculture/U.S. Environmental Protection Agency AgSTAR program maintains extensive information on manure management technologies, including anaerobic digestion. AgSTAR currently lists 169 projects operating in the US. Most project development to date has occurred in the dairy sector. A much smaller number of projects have also been developed in the swine, beef, and poultry sectors.

Goals and Timing

Install anaerobic digesters and methane utilization projects at all large dairies >1,200 head by 2030. Install anaerobic digesters and methane utilization projects at medium-sized dairies between 350-1,200 head by 2030. Begin implementation in 2012. Progress toward the 2030 goals assumes installation of approximately 1800 projects by 2020 and the full goal of 7,600 projects by 2030.

Financing Options

Renewable Energy Credit sales, energy production sales, pooled loan programs, loan credit enhancements, tax incentives.

17. Forest Retention Practices

Policy Description

Reduce the rate at which existing forests are cleared and converted to developed uses. Much of the carbon stored in forest biomass and soils can be lost as a result of such a land-use conversion. In addition, much of the annual carbon dioxide sequestration potential is lost when forests are cleared for development. Conservation purchases or easements can be used to maintain land under forest cover. Indirectly, forest retention programs also support smart development by maintaining development within targeted boundaries. Smart land use results in lower transportation energy consumption and emissions. Retention of forested areas also provides the potential for continued

biomass production that can be used in the manufacture of durable wood products (e.g., furniture, structures) and renewable energy.

Goals and Timing

The overall goal for the policy is to reduce the rate of forest conversion to developed use by 50% by 2030. This goal is in-line with the goals of similar policies recommended in many state climate action plans. Implementation begins in 2012 with a linear ramp-up toward the 50% goal achieved in 2030.

Financing Options

Easements, land trust partnerships, tax exemptions, targeted sustainable forestry harvest revenues.

18. Reforestation Management Practices

Policy Description

Afforestation refers to establishing forests on land that has not historically been forested (e.g., rangeland or grassland areas). Reforestation refers to the re-establishment of forest cover on areas that were once forested but now have little or no cover (e.g., croplands or other cleared areas). Each of these approaches, involve practices such as soil preparation, erosion control, tree planting, and maintenance activities during early years to ensure conditions that support forest establishment and growth. Expansion of forested areas provides future biomass production that can be used in the manufacture of durable wood products (e.g., furniture, structures) and renewable energy. The policy supports near-term job growth for forest planting, maintenance, and technical assistance. Over the longer-term (post-2030), the policy provides for job growth in wood products harvesting and production and renewable energy production.

Goals and Timing

The overall goal for the policy is to convert one-third of marginal (idle) crop lands potential identified by the Nicolas Institute T-AGG Study to forest cover by 2030. This study identified 14 million hectares (MMha) of land with potential for conversion to herbaceous buffers. The policy design also promotes the use of biomass from this expanded forest area for harvested wood products and energy. The goal is in-line with the goals of similar policies recommended in state climate action plans. Implementation begins in 2012 with around 150,000 hectares planted and ramping up to about 250,000 hectares planted per year by 2015. A similar sustained level of planting continues to 2030. US regions most heavily addressed through this policy are the southeast, south central, and northern prairie states.

Financing Options

Cost sharing, carbon conscious mitigation funds, green infrastructure utilities.

19. Urban Forest Management Practices

Policy Description

Expansion and maintenance of urban tree canopies reduces energy consumption through shading and wind protection of buildings. Additional benefits include reductions in local ambient

temperatures (urban heat island effect), air pollutant removal, and reduced storm water run-off. Local jobs are created through the needs for both near-term tree planting/establishment (including production of trees for urban plantings) and longer-term urban forest maintenance. Larger and better-maintained urban forests can also sequester and store more carbon.

Goals and Timing

The overall goal for the policy is to increase the US average urban canopy cover from 27% to 36% by 2060. This will require planting a total urban area of about 21,500 square kilometers (km²) by 2030 (over 750 million trees). An emphasis of the policy is to strategically plant trees to provide shade and wind protection to residential and non- residential structures (75% of plantings are targeted for strategic plantings in suburban areas, where studies show good potential for energy savings). Implementation begins in 2012, and the policy aims to plant about 600 km² per year through 2015, 860 km²/yr. through 2020, 1,200 km²/yr. through 2025, and 1,700 km²/yr. through 2030.

Financing

Ecosystem service revenue systems, cost sharing, green infrastructure utilities.

20. Integrated Waste Reduction, Recycling, and Landfill Gas Programs

Policy Description

Municipal solid waste (MSW) source reduction covers programs that reduce the amount of waste generated from the residential, commercial, and government sectors. There are a wide range of source reduction programs, including food and lawn/garden waste reduction via onsite mulching and composting, container re-use, junk mail reduction programs, and cradle-to-cradle product development (where products are returned to a manufacturer after use). Reducing generation at the source reduces both the upstream and downstream energy used to manufacture and transport packaging/products and to manage these materials after use in the waste stream. Emissions associated with this upstream/downstream energy use are also reduced as a result, in addition to the emissions associated with waste management (e.g., waste combustion or landfilling).

Goals and Timing

The overall goal for the policy is to reduce US per capita waste generation per capita by 15% by 2030. Implementation of the policy begins in 2012, and a reduction in per capita generation of 5% is achieved by 2020. These levels of source reduction are consistent with those recommended in many state action plans.

Financing Options

Regulatory thresholds that require self-funding and lead to incentives for reduction of implementation costs, volume/weight based waste pricing, advanced recovery fees, incremental user fee adjustments, tax incentives, Renewable Energy Credit market.