

Multi-Sector Working Group

Energy and Built Environment Strategies Reference Guide

Solid Waste: This strategy will involve undertaking efforts to reduce emissions associated with municipal solid waste through increased recycling, reuse, and composting; green purchasing; optimized methane recovery; and waste to energy recovery. The proposed consensus recommendation is to implement efforts that would achieve a 60-70% recycling rate and an 80% reduction in waste to landfills by 2040. Analysis results show this strategy could result in a 0.1 % reduction in region-wide emissions (~0.1 MMT CO₂e reduction out of the 98 MMT CO₂e goal).

Existing buildings: This strategy will involve undertaking efforts to reduce energy and water consumption in the portfolio of existing buildings (public and private) through actions such as improved energy code compliance, green purchasing, and government or utility efficiency programs. The proposed consensus recommendation is to implement efforts that would achieve a 15% reduction (1% per year for 15 years) in existing building energy use. Analysis results show this strategy could result in a 4.9% reduction in region-wide emissions (~5.3 MMT CO₂e reduction out of the 98 MMT CO₂e goal).

New Buildings: This strategy will involve undertaking efforts to improve new building energy and water performance through improved energy codes, net zero building policies, and updates to development codes and policies. The proposed consensus recommendation is to implement efforts that would achieve 15% reduction in new building energy use by 2030; and 25% of new buildings net zero by 2040. Analysis results show this strategy could result in a 2.4 % reduction in region-wide emissions (~2.6 MMT CO₂e reduction out of the 98 MMT CO₂e goal).

Infrastructure Energy: This strategy will involve undertaking efforts to increase infrastructure efficiency and renewable energy use through investments in end use efficiency and deployment of on-site renewables by local and regional utilities and authorities. The proposed consensus recommendation is to implement efforts that would achieve a 35% reduction in fossil fuel use for infrastructure systems by 2040. Analysis results show this strategy could result in a 0.1 % reduction in region-wide emissions (~0.1 MMT CO₂e reduction out of the 98 MMT CO₂e goal).

Clean Power Supply: This strategy will involve undertaking efforts to reduce electric power sector emissions by supporting state actions to achieve a 30% decrease in MT CO₂e. This would involve supporting full state implementation of the federal Clean Power Plan, or your states equivalent program. Analysis results show this strategy could result in a 7.4 % reduction in region-wide emissions (~8.1 MMT CO₂e reduction out of the 98 MMT CO₂e goal).

Distributed Renewables: This strategy will involve undertaking efforts to increase distributed renewable energy deployment through strategies such as solarize/solar co-op programs and municipal solar installations. Currently, there are approximately 30,000 (equivalent) residential Photovoltaic (PV) systems supplying 0.25% of the regional demand. The consensus recommended strategy will support a region wide goal of an increase to 250,000 (equivalent) residential Photovoltaic (PV) systems by 2040, supplying approximately 2% of the electrical needs for the region. Analysis results show this strategy could result in a 0.7% reduction in region-wide emissions (~0.8 MMT CO₂e reduction out of the 98 MMT CO₂e goal).

Non-Road Equipment: This strategy will involve undertaking efforts to reduce emissions from non-road engines through government purchasing, retrofits, and anti-idling policies. The proposed consensus recommendation is to implement efforts that would achieve a 20% reduction in MT CO₂e emissions by 2040. Analysis results show this strategy could result in a 0.1 % reduction in region-wide emissions (~0.1 MMT CO₂e reduction out of the 98 MMT CO₂e goal).

Fugitive Emissions from Natural Gas Pipelines: This strategy will involve supporting efforts to reduce natural gas distribution system leaks and fugitive emissions achieved through efforts to support cost recovery for utility programs that upgrade pipeline infrastructure. The proposed consensus recommendation is to implement efforts that would achieve a 20% reduction of natural gas fugitive emissions by 2040. Analysis results show this strategy could result in a 0.1 % reduction in region-wide emissions (~0.1 MMT CO₂e reduction out of the 98 MMT CO₂e goal).

Multi-Sector Working Group Energy and Built Environment Strategies Question #1

	Solid Waste	Existing Buildings	New Buildings	Infrastructure Energy	Clean Power Supply	Distributed Renewables	Non-Road Equipment	Reduced Natural Gas Pipeline Leaks
	What is the likelihood that your jurisdiction could implement policies or which support the region-wide municipal solid waste goals?	What is the likelihood of your jurisdiction implementing policies or programs to support the goal of reducing energy and water consumption in existing buildings?	What is the likelihood of your jurisdiction implementing policies or programs to support the goal of reducing energy and water consumption in new buildings?	What is the likelihood that your jurisdiction could implement policies or which support the region-wide goal of increased infrastructure efficiency and renewable energy use?	What is the likelihood of your jurisdiction implementing policies or programs to support the goal of reducing energy and water consumption in existing buildings?	What is the likelihood that your jurisdiction could implement policies or which support the region-wide goal of increased distributed renewable energy deployment?	What is the likelihood that your jurisdiction could implement policies or which support the region-wide goal of reduced emission from non-road engines?	What is the likelihood that your jurisdiction could implement policies or which support the region-wide goal of decreased fugitive emissions from natural gas leaks?
Already implementing	11	14	14	8	8	9	5	0
Plans to Implement	3	1	0	2	1	0	0	0
Could implement, no current plans	3	3	2	1	4	5	9	2
Unlikely to implement	0	1	2	3	1	2	3	0
Lack authority to implement	0	0	2	2	4	2	0	10
Inconsistent with local policy	0	1	0	1	1	1	1	4
TOTAL	17	20	20	17	19	19	18	16

Multi-Sector Working Group Energy and Built Environment Strategies Question #2

	Solid Waste	Existing Buildings	New Buildings	Infrastructure Energy	Clean Power Supply	Distributed Renewables	Non-Road Equipment	Reduced Natural Gas Pipeline Leaks
	Is the proposed consensus recommended strategy for the 60-70% recycling rate as well as an 80% landfill reduction, a reasonable assumption for your jurisdiction?	Is the proposed consensus recommendation of 15% a reasonable assumption for your jurisdiction?	Are the proposed consensus recommendation of 15% and 25%, respectively, a reasonable assumption for your jurisdiction?	Is the proposed consensus recommendation of a 35% reduction a reasonable assumption for your jurisdiction?	Are there other thoughts or comments on this strategy that you wish to share?	Is the proposed consensus recommended strategy to increase deployment of residential PV systems to account for 2% of electricity supply a reasonable assumption for your jurisdiction?	Is the proposed consensus recommended strategy calling for a 20% reduction of emissions by 2040 a reasonable assumption for your jurisdiction?	Is the proposed consensus recommended strategy of a 20% reduction in fugitive emissions a reasonable assumption for your jurisdiction?
Yes	7	10	8	3	1	5	2	1
Contingent	3	4	2	6	2	3	3	0
Not discussed, unsure	3	4	4	2	1	4	3	1
No	1	0	0	1	1	0	0	1
TOTAL	14	18	14	12	5	12	8	3