

Road Transportation

GHG Reduction Strategy	Strategy/Focus Area	Examples of Typical Policies and Actions	Estimated Long-Term GHG Reduction Potential
GHG Emissions Category: Increase Zero Emission and/or Alternative Fuels	Construction/Landscape/Waste hauler Vehicles/Equipment	- Encourage use of biogas or electric equipment - Mandate conversion of diesel/gasoline construction and/or landscape equipment to biogas or electric	Very low Low None
	Zero Emission/Alternative Fuel Infrastructure	- Identify and prepare city-wide biofuel and charging station siting plan - Install EV charging and other alternative fuel stations in parking structures/street parking - Provide preferred parking for low emission vehicles in parking structures/street parking - Install roundabouts in appropriate areas	Low/Medium Low Low/Medium Low/Medium
	Preferred Parking	- TDM outreach and education on options to reduce travel demand and optimize transportation modes - Identify employers to connect to vanpools, carpools through SANDAG iCommute program - Implement and incentivize carpools, vanpools - Increase telecommuting – work with SANDAG to implement - Adopt TDM ordinance specifying trip type goals for new developments	Very low Low Low/Medium Medium Low/Medium
	Transportation Systems Management (TSM) Transportation Demand Management (TDM)	- Implement a local shuttle service system in the downtown area to reduce single occupancy vehicle use - Install transit-only lanes - Increase public transit routes and/or route frequency to increase mode share - Provide park and ride lots at transit stations and facilitate their use	Low/Medium Low Low Medium Low/Medium
VMT Reduction	Transit systems	- Develop pedestrian plan for more sidewalks - Update trails master plan to increase new connection points and improve accessibility	None None
	Active Transportation (Walking)	- Pedestrian improvements (link walkable areas, safety features/shade/crosswalks etc) - Implement pedestrian-only and safe routes to school zones	Low Low
	Active Transportation (Biking)	Adopt ordinance to require new developments and some retrofits to install bike racks and other supportive amenities like showers	Very low
	Complete Streets	Design streets to provide for all users - cars, bicycles, walkers, and transit users	Low

GHG Reduction Strategy	Strategy Focus Area	Examples of Typical	Estimated Long-Term GHG Reduction Potential
GHG Emissions Category: Energy			
Zero Net Energy	Zero Net Energy (ZNE)	Implement an ordinance requiring new commercial buildings achieve ZNE standards	Medium
Increase Energy Efficiency / Conserve Energy	Education	- Encourage energy audits in existing homes (single- and multi-family) and commercial buildings upon sale or major renovation - Encourage energy efficiency improvements through rebates or incentives	Very Low Low
	Retrofits	- Implement an ordinance requiring energy audits for residential and commercial buildings at time of major renovation or sale - Adopt an energy benchmarking ordinance	Low/Medium Medium
	Smart Meters & Appliances	Policies to promote the installation of smart appliances that interface with smart meters at homes and business	Very Low
	Municipal Retrofits	Use SANDAG Energy Roadmap and implement replacement programs or more efficient ventilation systems	Low/Medium
Increase Renewable Energy	Municipal on-site renewable energy	Increase on site renewable energy generation	Low/Medium
	City-wide renewable supply	Adopt policies to increase renewables in electricity beyond state mandate of 50% by 2030	High
	Behind the Meter Renewable Supply	Promote PV in existing buildings (residential and non-residential) and surface parking areas, such as to reduce/waive permit fees	Low
	Water Heating	Require installation of solar or tankless hot water heaters in existing and new residential and non-residential buildings	Low/Medium

Water, Waste and Carbon Sinks

GHG Reduction Strategy	Strategy/Focus Area	Examples of Typical	Estimated Long-Term GHG Reduction Potential
GHG Emissions Category: Water & Wastewater Increase Recycled, Reclaimed & Grey Water Water Conservation	Recycled, Reclaimed & Grey Water	• Adopt an ordinance to facilitate greywater systems (e.g., pre-plumbing requirements for new residential and commercial buildings)	Low
	Outdoor Water Use	• Provide education on pool covers to pool owners • Adopt an ordinance allowing weather-based irrigation systems and encourage installation of rain barrels and rain catchment systems • Update landscape water conservation ordinance including, for example, water budgets	Very low Low Low/Medium
	Indoor Water Use	• Mandate installation of high efficiency fixtures at time of sale or renovation • Implement an ordinance requiring water use audits at time of sale or major renovation	Low Low
	Municipal Water Use	• Install high efficiency fixtures at municipal facilities • Hydrozone landscapes at municipal facilities and parks	Low Very Low
	Rate Structures	• Implement water rate increases	Low/Medium
Water Utility Improvements	Methane Capture	• Increase methane capture at wastewater treatment plants	Low/Medium
	Facility Improvements	• Identify water utility efficiencies • Identify and address leaks	Unknown Unknown
GHG Emissions Category: Solid Waste Solid Waste Reduction & Increased Recycling	GHG Emissions Category: Solid Waste		
	Solid Waste Reduction & Increased Recycling	• Adopt a zero-waste landfill policy	Medium
		• Implement a composting ordinance • Implement a community garden ordinance	Low Low
GHG Emissions Category: Carbon Sequestration Trees & Open Space	GHG Emissions Category: Carbon Sequestration		
	Easements	• Encourage conservation easements to retain vegetation that capture and store carbon as they grow	Low
	Shade Trees	• Implement an ordinance requiring new development and/or major renovation projects to plant shade trees • Update City street tree guidelines and/or landscaping ordinances to include planting shade trees where appropriate	Low Low
	Urban Forest	• Implement an urban forestry or City-wide tree planting program	Low

Road Transportation

GHG Reduction Strategy	Strategy Focus Area	Examples of Typical Policies and Actions	Estimated Long-Term GHG Reduction Potential	
GHG Emissions Category: Transportation	Construction/Landscape/Waste hauler Vehicles/Equipment	- Encourage use of biogas or electric equipment - Mandate conversion of diesel/gasoline construction and/or landscape equipment to biogas or electric	Very low	CITY EQUIPMENT
	Zero Emission/Alternative Fuel Infrastructure	- Identify and prepare city-wide biofuel and charging station siting plan - Install EV charging and other alternative fuel stations	None	YES
	Preferred Parking	- Provide preferred parking for low emission vehicles in parking structures/street parking - Install roundabouts in appropriate areas	Low/Medium	NO
	Transportation Systems Management (TSM)	- TDM outreach and education on options to reduce travel demand an optimize transportation modes - Identify employers to connect to vanpools, carpools through SANDAG iCommute program - Implement and incentivize carpools, vanpools - Increase telecommuting – work with SANDAG to implement - Adopt TDM ordinance specifying trip type goals for new developments	Very low	YES
VMT Reduction	Transportation Demand Management (TDM)	- Implement a local shuttle service system in the downtown area to reduce single occupancy vehicle use - Install transit-only lanes - Increase public transit routes and/or route frequency to increase mode share - Provide park and ride lots at transit stations and facilitate their use	Low	YES
	Active Transportation (Walking)	- Develop pedestrian plan for more sidewalks - Update trails master plan to increase new connection points and improve accessibility - Pedestrian improvements (link walkable areas, safety features/shade/crosswalks etc) - Implement pedestrian-only and safe routes to school zones	Low	NO
	Active Transportation (Biking)	- Adopt ordinance to require new developments and some retrofits to install bike racks and other supportive amenities like showers - Design streets to provide for all users - cars, bicycles, walkers, and transit users	Very low	NO
	Complete Streets		Low	YES

Building Energy

GHG Reduction Strategy	Strategy Focus/Area	Examples of Typical	Estimated Long-Term GHG Reduction Potential
GHG Emissions Category: Energy			
Zero Net Energy	Zero Net Energy (ZNE)	Implement an ordinance requiring new commercial buildings achieve ZNE standards	Medium YES
Increase Energy Efficiency / Conserve Energy	Education	- Encourage energy audits in existing homes (single- and multi-family) and commercial buildings upon sale or major renovation - Encourage energy efficiency improvements through rebates or incentives	Very Low Low OK
	Retrofits	- Implement an ordinance requiring energy audits for residential and commercial buildings at time of major renovation or sale - Adopt an energy benchmarking ordinance	Low/Medium Medium NO
	Smart Meters & Appliances	Policies to promote the installation of smart appliances that interface with smart meters at homes and business	Very Low OK
	Municipal Retrofits	Use SANDAG Energy Roadmap and implement measures in municipal facilities, such as light replacement programs or more efficient ventilation systems	Low/Medium OK
Increase Renewable Energy	Municipal on-site renewable energy	Increase on site renewable energy generation	Low/Medium OK
	City-wide renewable supply	Adopt policies to increase renewables in electricity beyond state mandate of 50% by 2030	High OK
	Behind the Meter Renewable Supply	Promote PV in existing buildings (residential and non-residential) and surface parking areas, such as to reduce/waive permit fees	Low OK
	Water Heating	Require installation of solar or tankless hot water heaters in existing and new residential and non-residential buildings	Low/Medium NO

Water, Waste and Carbon Sinks

GHG Reduction Strategy	Strategy Focus Area	Examples of Typical	Estimated Long-Term GHG Reduction Potential	
GHG Emissions Category: Water & Wastewater				
Water Conservation	Increase Recycled, Reclaimed & Grey Water	• Adopt an ordinance to facilitate greywater systems (e.g., pre-plumbing requirements for new residential and commercial buildings)	Low	OK
	Outdoor Water Use	• Provide education on pool covers to pool owners • Adopt an ordinance allowing weather-based irrigation systems and encourage installation of rain barrels and rain catchment systems • Update landscape water conservation ordinance including, for example, water budgets • Mandate installation of high efficiency fixtures at time of sale or renovation • Implement an ordinance requiring water use audits at time of sale or major renovation	Very low Low Low/Medium	 OK CITY PROPERTY COMMERCIAL ONLY
	Indoor Water Use	• Install high efficiency fixtures at municipal facilities • Hydrozone landscapes at municipal facilities and parks • Implement water rate increases • Increase methane capture at wastewater treatment plants • Identify water utility efficiencies • Identify and address leaks	Low Very Low Low/Medium Low/Medium Unknown Unknown	 YES NO OK OK
	Municipal Water Use	• Implement water rate increases • Increase methane capture at wastewater treatment plants • Identify water utility efficiencies • Identify and address leaks	Low Very Low Low/Medium Low/Medium	 YES NO OK OK
	Rate Structures	• Implement water rate increases	Low	YES
Water Utility Improvements	Methane Capture	• Increase methane capture at wastewater treatment plants	Low/Medium	NO
	Facility Improvements	• Identify water utility efficiencies • Identify and address leaks	Unknown Unknown	OK OK
	GHG Emissions Category: Solid Waste			
Solid Waste Reduction & Increased Recycling	Solid Waste Reduction & Increased Recycling	• Adopt a zero-waste landfill policy	Medium	TRY
		• Implement a composting ordinance	Low	NO
		• Implement a community garden ordinance	Low	NO
GHG Emissions Category: Carbon Sequestration				
Trees & Open Space	Easements	• Encourage conservation easements to retain vegetation that capture and store carbon as they grow	Low	OK
	Shade Trees	• Implement an ordinance requiring new development and/or major renovation projects to plant shade trees • Update City street tree guidelines and/or landscaping ordinances to include planting shade trees where appropriate	Low Low	OK OK
	Urban Forest	• Implement an urban forestry or City-wide tree planting program	Low	OK

Road Transportation

GHG Reduction Strategy	Strategy Focus Area	Examples of Typical Policies and Actions	Estimated Long-Term GHG Reduction Potential
GHG Emissions Category: Increase Zero Emission and/or Alternative Fuels	Construction/Landscape/Waste hauler Vehicles/Equipment	- Encourage use of biogas or electric equipment - Mandate conversion of diesel/gasoline construction and/or landscape equipment to biogas or electric	Very low Low None
	Zero Emission/Alternative Fuel Infrastructure	- Identify and prepare city-wide biofuel and charging station siting plan - Install EV charging and other alternative fuel stations	Low/Medium Low
	Preferred Parking	- Provide preferred parking for low emission vehicles in parking structures/street parking - Install roundabouts in appropriate areas	Low/Medium Low/Medium
	Transportation Systems Management (TSM)	- TDM outreach and education on options to reduce travel demand an optimize transportation modes - Identify employers to connect to vanpools, carpools through SANDAG iCommute program - Implement and incentivize carpools, vanpools - Increase telecommuting – work with SANDAG to implement - Adopt TDM ordinance specifying trip type goals for new developments	Very low Low Low/Medium Medium Low/Medium
VMT Reduction	Transit systems	- Implement a local shuttle service system in the downtown area to reduce single occupancy vehicle use - Install transit-only lanes - Increase public transit routes and/or route frequency to increase mode share - Provide park and ride lots at transit stations and facilitate their use	Low Medium Low/Medium Low/Medium
	Active Transportation (Walking)	- Develop pedestrian plan for more sidewalks - Update trails master plan to increase new connection points and improve accessibility	None None
	Active Transportation (Biking)	- Pedestrian improvements (link walkable areas, safety features/shade/crosswalks etc) - Implement pedestrian-only and safe routes to school zones	Low Low
	Complete Streets	- Adopt ordinance to require new developments and some retrofits to install bike racks and other supportive amenities like showers - Design streets to provide for all users - cars, bicycles, walkers, and transit users	Very low Low

Extended Downtown Urban Bike Trail

Building Energy

GHG Reduction Strategy	Strategy Focus Area	Examples of Typical	Estimated Long-Term GHG Reduction Potential
GHG Emissions Category: Energy			
Zero Net Energy	Zero Net Energy (ZNE)	Implement an ordinance requiring new commercial buildings achieve ZNE standards	Medium
Increase Energy Efficiency / Conserve Energy	Education	- Encourage energy audits in existing homes (single- and multi-family) and commercial buildings upon sale or major renovation - Encourage energy efficiency improvements through rebates or incentives	Very Low Low
	Retrofits	- Implement an ordinance requiring energy audits for residential and commercial buildings at time of major renovation or sale - Adopt an energy benchmarking ordinance	Low/Medium Medium
	Smart Meters & Appliances	Policies to promote the installation of smart appliances that interface with smart meters at homes and business	Very Low
	Municipal Retrofits	Use SANDAG Energy Roadmap and implement measures in municipal facilities, such as light replacement programs or more efficient ventilation systems	Low/Medium
Increase Renewable Energy	Municipal on-site renewable energy	Increase on site renewable energy generation	Low/Medium
	City-wide renewable supply	Adopt policies to increase renewables in electricity beyond state mandate of 50% by 2030	High
	Behind the Meter Renewable Supply	Promote PV in existing buildings (residential and non-residential) and surface parking areas, such as to reduce/waive permit fees	Low
	Water Heating	Require installation of solar or tankless hot water heaters in existing and new residential and non-residential buildings	Low/Medium

Water, Waste and Carbon Sinks

GHG Reduction Strategy	Strategy/Focus Area	Examples of Typical	Estimated Long-Term GHG Reduction Potential
GHG Emissions Category: Water & Wastewater			
Increase Recycled, Reclaimed & Grey Water Conservation	Recycled, Reclaimed & Grey Water	• Adopt an ordinance to facilitate greywater systems (e.g., pre-plumbing requirements for new residential and commercial buildings)	Low
	Outdoor Water Use	• Provide education on pool covers to pool owners • Adopt an ordinance allowing weather-based irrigation systems and encourage installation of rain barrels and rain catchment systems • Update landscape water conservation ordinance including, for example, water budgets	Very low
	Indoor Water Use	• Mandate installation of high efficiency fixtures at time of sale or renovation • Implement an ordinance requiring water use audits at time of sale or major renovation	Low
	Municipal Water Use	• Install high efficiency fixtures at municipal facilities • Hydrozone landscapes at municipal facilities and parks	Low
Water Utility Improvements	Rate Structures	• Implement water rate increases	Very Low
	Methane Capture	• Increase methane capture at wastewater treatment plants	Low/Medium
	Facility Improvements	• Identify water utility efficiencies • Identify and address leaks	Low/Medium
			Unknown
GHG Emissions Category: Solid Waste			
Solid Waste Reduction & Increased Recycling	Solid Waste Reduction & Increased Recycling	• Adopt a zero-waste landfill policy	Medium
		• Implement a composting ordinance	Low
		• Implement a community garden ordinance	Low
GHG Emissions Category: Carbon Sequestration			
Trees & Open Space	Easements	• Encourage conservation easements to retain vegetation that capture and store carbon as they grow	Low
	Shade Trees	• Implement an ordinance requiring new development and/or major renovation projects to plant shade trees • Update City street tree guidelines and/or landscaping ordinances to include planting shade trees where appropriate	Low
	Urban Forest	• Implement an urban forestry or City-wide tree planting program. Update canopy goal to plant more trees.	Low

Provide incentives to convert turf to drought tolerant landscape choices.

Don't remove mature trees!
Allocate more funding to maintain preserve existing trees!
Hire arborist to advise on proper tree care.

Road Transportation

GHG Reduction Strategy	Strategy/Topic/Area	Examples of Typical Policies and Actions	Estimated Long-Term GHG Reduction Potential
Increase Zero Emission and/or Alternative Fuels	Construction/Landscape/Waste hauler Vehicles/Equipment	- Encourage use of biogas or electric equipment - Mandate conversion of diesel/gasoline construction and/or landscape equipment to biogas or electric	Very low
	Zero Emission/Alternative Fuel Infrastructure	- Identify and prepare city-wide biofuel and charging station siting plan - Install EV charging and other alternative fuel stations	Low
	Preferred Parking	Provide preferred parking for low emission vehicles in parking structures/street parking	None
	Transportation Systems Management (TSM)	Install roundabouts in appropriate areas	Low/Medium
Reduce Fuel Use	Transportation Demand Management (TDM)	- TDM outreach and education on options to reduce travel demand and optimize transportation modes - Identify employers to connect to vanpools, carpools through SANDAG iCommute program - Implement and incentivize carpools, vanpools - Increase telecommuting – work with SANDAG to implement - Adopt TDM ordinance specifying trip type goals for new developments	Very low
	Transit systems	- Implement a local shuttle service system in the downtown area to reduce single occupancy vehicle use - Install transit-only lanes - Increase public transit routes and/or route frequency to increase mode share - Provide park and ride lots at transit stations and facilitate their use	Low
	Active Transportation (Walking)	- Develop pedestrian plan for more sidewalks - Update trails master plan to increase new connection points and improve accessibility	Medium
	Active Transportation (Biking)	- Pedestrian improvements (link walkable areas, safety features/shade/crosswalks etc) - Implement pedestrian-only and safe routes to school zones	Low
VMT Reduction	Complete Streets	- Adopt ordinance to require new developments and some retrofits to install bike racks and other supportive amenities like showers - Design streets to provide for all users - cars, bicycles, walkers, and transit users	Very low
			Low

Building Energy

GHG Reduction Strategy	Strategy Focus Area	Examples of Typical	Estimated Long-Term GHG Reduction Potential	
GHG Emissions Category: Energy				
Zero Net Energy	Zero Net Energy (ZNE)	Implement an ordinance requiring new commercial buildings achieve ZNE standards	Medium	7
Increase Energy Efficiency / Conserve Energy	Education	- Encourage energy audits in existing homes (single- and multi-family) and commercial buildings upon sale or major renovation - Encourage energy efficiency improvements through rebates or incentives	Very Low Low	2
	Retrofits	- Implement an ordinance requiring energy audits for residential and commercial buildings at time of major renovation or sale - Adopt an energy benchmarking ordinance	Low/Medium Medium	2
	Smart Meters & Appliances	Policies to promote the installation of smart appliances that interface with smart meters at homes and business	Very Low	1
	Municipal Retrofits	Use SANDAG Energy Roadmap and implement measures in municipal facilities, such as light replacement programs or more efficient ventilation systems	Low/Medium	
Increase Renewable Energy	Municipal on-site renewable energy	Increase on site renewable energy generation	Low/Medium	1
	City-wide renewable supply	Adopt policies to increase renewables in electricity beyond state mandate of 50% by 2030	High	
	Behind the Meter Renewable Supply	Promote PV in existing buildings (residential and non-residential) and surface parking areas, such as to reduce/waive permit fees	Low	1
	Water Heating	Require installation of solar or tankless hot water heaters in existing and new residential and non-residential buildings	Low/Medium	1

Water, Waste and Carbon Sinks

GHG Reduction Strategy	Strategy Focus Area	Examples of Typical	Estimated Long-Term GHG Reduction Potential
GHG Emissions Category: Water & Wastewater			
Water Conservation	Increase Recycled, Reclaimed & Grey Water	Adopt an ordinance to facilitate greywater systems (e.g., pre-plumbing requirements for new residential and commercial buildings)	Low
	Outdoor Water Use	- Provide education on pool covers to pool owners - Adopt an ordinance allowing weather-based irrigation systems and encourage installation of rain barrels and rain catchment systems - Update landscape water conservation ordinance including, for example, water budgets - Mandate installation of high efficiency fixtures at time of sale or renovation - Implement an ordinance requiring water use audits at time of sale or major renovation	Very low Low Low/Medium
	Indoor Water Use	- Mandate installation of high efficiency fixtures at time of sale or renovation - Implement an ordinance requiring water use audits at time of sale or major renovation	Low Low
	Municipal Water Use	- Install high efficiency fixtures at municipal facilities - Hydrozone landscapes at municipal facilities and parks - Implement water rate increases - Increase methane capture at wastewater treatment plants - Identify water utility efficiencies - Identify and address leaks	Low Very Low Low/Medium Low/Medium Unknown Unknown
	Water Utility Improvements	- Identify water utility efficiencies - Identify and address leaks	Unknown Unknown
GHG Emissions Category: Solid Waste			
Solid Waste Reduction & Increased Recycling	Solid Waste Reduction & Increased Recycling	- Adopt a zero-waste landfill policy - Implement a composting ordinance - Implement a community garden ordinance	Medium Low Low
GHG Emissions Category: Carbon Sequestration			
Trees & Open Space	Easements	Encourage conservation easements to retain vegetation that capture and store carbon as they grow	Low
	Shade Trees	- Implement an ordinance requiring new development and/or major renovation projects to plant shade trees - Update City street tree guidelines and/or landscaping ordinances to include planting shade trees where appropriate	Low Low
	Urban Forest	Implement an urban forestry or City-wide tree planting program	Low

Road Transportation

GHG Reduction Strategy	Strategy Focus Area	Examples of Typical Policies and Actions	Estimated Long-Term GHG Reduction Potential	
GHG Emissions Category: Transportation				
Increase Zero Emission and/or Alternative Fuels	Construction/Landscape/Waste hauler Vehicles/Equipment	- Encourage use of biogas or electric equipment - Mandate conversion of diesel/gasoline construction and/or landscape equipment to biogas or electric	Very low	Uncertain yes
	Zero Emission/Alternative Fuel Infrastructure	- Identify and prepare city-wide biofuel and charging station siting plan - Install EV charging and other alternative fuel stations	None	yes
	Preferred Parking	- Provide preferred parking for low emission vehicles in parking structures/street parking - Install roundabouts in appropriate areas	Low/Medium	NO
	Transportation Systems Management (TSM)	- TDM outreach and education on options to reduce travel demand an optimize transportation modes - Identify employers to connect to vanpools, carpools through SANDAG iCommute program - Implement and incentivize carpools, vanpools - Increase telecommuting – work with SANDAG to implement - Adopt TDM ordinance specifying trip type goals for new developments	Low	Medium
Reduce Fuel Use	Transportation Demand Management (TDM)	- Implement a local shuttle service system in the downtown area to reduce single occupancy vehicle use - Install transit-only lanes - Increase public transit routes and/or route frequency to increase mode share - Provide park and ride lots at transit stations and facilitate their use - Develop pedestrian plan for more sidewalks - Update trails master plan to increase new connection points and improve accessibility	Low/Medium	yes
	Transit systems	- Implement a local shuttle service system in the downtown area to reduce single occupancy vehicle use - Install transit-only lanes - Increase public transit routes and/or route frequency to increase mode share - Provide park and ride lots at transit stations and facilitate their use	Low	Medium
	Active Transportation (Walking)	- Develop pedestrian plan for more sidewalks - Update trails master plan to increase new connection points and improve accessibility	None	yes
	Active Transportation (Biking)	- Pedestrian improvements (link walkable areas, safety features/shade/crosswalks etc) - Implement pedestrian-only and safe routes to school zones - Adopt ordinance to require new developments and some retrofits to install bike racks and other supportive amenities like showers - Design streets to provide for all users - cars, bicycles, walkers, and transit users	Low	yes
VMT Reduction	Complete Streets	Design streets to provide for all users - cars, bicycles, walkers, and transit users	Very low	yes
			Low	no

GHG Reduction Strategy	Strategy/Measure Area	Examples of Typical	Estimated Long-Term GHG Reduction Potential	
GHG Emissions Category: Energy				
Zero Net Energy	Zero Net Energy (ZNE)	Implement an ordinance requiring new commercial buildings achieve ZNE standards	Medium	yes
Increase Energy Efficiency / Conserve Energy	Education	- Encourage energy audits in existing homes (single- and multi-family) and commercial buildings upon sale or major renovation - Encourage energy efficiency improvements through rebates or incentives	Very Low Low	yes
	Retrofits	- Implement an ordinance requiring energy audits for residential and commercial buildings at time of major renovation or sale - Adopt an energy benchmarking ordinance	Low/Medium Medium	yes
	Smart Meters & Appliances	Policies to promote the installation of smart appliances that interface with smart meters at homes and business	Very Low	no
	Municipal Retrofits	- Use SANDAG Energy Roadmap and implement measures in municipal facilities, such as light replacement programs or more efficient ventilation systems - Increase on site renewable energy generation	Low/Medium	yes
Increase Renewable Energy	Municipal on-site renewable energy	Increase on site renewable energy generation	Low/Medium	
	City-wide renewable supply	Adopt policies to increase renewables in electricity beyond state mandate of 50% by 2030	High	
	Behind the Meter Renewable Supply	Promote PV in existing buildings (residential and non-residential) and surface parking areas, such as to reduce/waive permit fees	Low	
	Water Heating	Require installation of solar or tankless hot water heaters in existing and new residential and non-residential buildings	Low/Medium	yes

Water, Waste and Carbon Sinks

GHG Reduction Strategy	Strategy Focus Area	Examples of Typical	Estimated Long-Term GHG Reduction Potential
GHG Emissions Category: Water & Wastewater			
Increase Recycled, Reclaimed & Grey Water Water Conservation	Recycled, Reclaimed & Grey Water	• Adopt an ordinance to facilitate greywater systems (e.g., pre-plumbing requirements for new residential and commercial buildings)	Low <i>yes</i>
	Outdoor Water Use	• Provide education on pool covers to pool owners • Adopt an ordinance allowing weather-based irrigation systems and encourage installation of rain barrels and rain catchment systems • Update landscape water conservation ordinance including, for example, water budgets	Very low Low <i>yes</i>
	Indoor Water Use	• Mandate installation of high efficiency fixtures at time of sale or renovation • Implement an ordinance requiring water use audits at time of sale or major renovation	Low Low <i>yes</i>
	Municipal Water Use	• Install high efficiency fixtures at municipal facilities • Hydrozone landscapes at municipal facilities and parks	Low Very Low <i>yes</i>
	Rate Structures Methane Capture	• Implement water rate increases • Increase methane capture at wastewater treatment plants	Low/Medium Low/Medium
Water Utility Improvements	Facility Improvements	• Identify water utility efficiencies • Identify and address leaks	Unknown Unknown <i>yes</i>
GHG Emissions Category: Solid Waste			
Solid Waste Reduction & Increased Recycling	Solid Waste Reduction & Increased Recycling	• Adopt a zero-waste landfill policy	Medium <i>yes</i>
		• Implement a composting ordinance	Low <i>yes</i>
		• Implement a community garden ordinance	Low <i>yes</i>
GHG Emissions Category: Carbon Sequestration			
Trees & Open Space	Easements	• Encourage conservation easements to retain vegetation that capture and store carbon as they grow	Low <i>yes</i>
	Shade Trees	• Implement an ordinance requiring new development and/or major renovation projects to plant shade trees • Update City street tree guidelines and/or landscaping ordinances to include planting shade trees where appropriate	Low Low <i>yes</i> <i>yes</i>
	Urban Forest	• Implement an urban forestry or City-wide tree planting program	Low <i>yes</i>

Road Transportation

GHG Reduction Strategy	Strategy Goals/Area	Examples of Typical Policies and Actions	Estimated Long-Term GHG Reduction Potential
GHG Emissions Category: Transportation	Increase Zero Emission and/or Alternative Fuels	• Encourage use of biogas or electric equipment • Mandate conversion of diesel/gasoline construction and/or landscape equipment to biogas or electric • Identify and prepare city-wide biofuel and charging station siting plan • Install EV charging and other alternative fuel stations • Provide preferred parking for low emission vehicles in parking structures/street parking • Install roundabouts in appropriate areas	Very low Low None Low/Medium Low Low/Medium
	Reduce Fuel Use	• TDM outreach and education on options to reduce travel demand an optimize transportation modes • Identify employers to connect to vanpools, carpools through SANDAG iCommute program • Implement and incentivize carpools, vanpools • Increase telecommuting – work with SANDAG to implement • Adopt TDM ordinance specifying trip type goals for new developments	Very low Low Low/Medium Low/Medium
	Transit systems	• Implement a local shuttle service system in the downtown area to reduce single occupancy vehicle use • Install transit-only lanes • Increase public transit routes and/or route frequency to increase mode share • Provide park and ride lots at transit stations and facilitate their use	Low/Medium Low Medium Low/Medium
	Active Transportation (Walking)	• Develop pedestrian plan for more sidewalks • Update trails master plan to increase new connection points and improve accessibility • Pedestrian improvements (link walkable areas, safety features/shade/crosswalks etc) • Implement pedestrian-only and safe routes to school zones	None None Low Low
VMT Reduction	Active Transportation (Biking)	• Adopt ordinance to require new developments and some retrofits to install bike racks and other supportive amenities like showers	Very low
	Complete Streets	• Design streets to provide for all users - cars, bicycles, walkers, and transit users	Low

GHG Reduction Strategy	Strategy Focus/Area	Examples of Typical	Estimated Long-Term GHG Reduction Potential	
GHG Emissions Category: Energy				
Zero Net Energy	Zero Net Energy (ZNE)	Implement an ordinance requiring new commercial buildings achieve ZNE standards	Medium	Y
Increase Energy Efficiency / Conserve Energy	Education	- Encourage energy audits in existing homes (single- and multi-family) and commercial buildings upon sale or major renovation - Encourage energy efficiency improvements through rebates or incentives	Very Low Low	Y
	Retrofits	- Implement an ordinance requiring energy audits for residential and commercial buildings at time of major renovation or sale - Adopt an energy benchmarking ordinance	Low/Medium Medium	Y
	Smart Meters & Appliances	Policies to promote the installation of smart appliances that interface with smart meters at homes and business	Very Low	Y
	Municipal Retrofits	Use SANDAG Energy Roadmap and implement measures in municipal facilities, such as light replacement programs or more efficient ventilation systems	Low/Medium	Y
	Municipal on-site renewable energy	Increase on site renewable energy generation	Low/Medium	Y
Increase Renewable Energy	City-wide renewable supply	Adopt policies to increase renewables in electricity beyond state mandate of 50% by 2030	High	Y
	Behind the Meter Renewable Supply	Promote PV in existing buildings (residential and non-residential) and surface parking areas, such as to reduce/waive permit fees	Low	Y
	Water Heating	Require installation of solar or tankless hot water heaters in existing and new residential and non-residential buildings	Low/Medium	Y

Water, Waste and Carbon Sinks

GHG Reduction Strategy	Strategy Focus Area	Examples of Typical	Estimated Long-Term GHG Reduction Potential
GHG Emissions Category: Water & Wastewater			
Increase Recycled, Reclaimed & Grey Water Water Conservation	Increase Recycled, Reclaimed & Grey Water	• Adopt an ordinance to facilitate greywater systems (e.g., pre-plumbing requirements for new residential and commercial buildings)	Low
	Outdoor Water Use	• Provide education on pool covers to pool owners • Adopt an ordinance allowing weather-based irrigation systems and encourage installation of rain barrels and rain catchment systems • Update landscape water conservation ordinance including, for example, water budgets • Mandate installation of high efficiency fixtures at time of sale or renovation • Implement an ordinance requiring water use audits at time of sale or major renovation	Very low Low Low/Medium
	Indoor Water Use	• Install high efficiency fixtures at municipal facilities • Hydrozone landscapes at municipal facilities and parks • Implement water rate increases • Increase methane capture at wastewater treatment plants • Identify water utility efficiencies • Identify and address leaks	Low Very Low Low/Medium Low/Medium Unknown Unknown
	Municipal Water Use		
	Rate Structures		
Water Utility Improvements	Methane Capture		
	Facility improvements		
GHG Emissions Category: Solid Waste			
Solid Waste Reduction & Increased Recycling	Solid Waste Reduction & Increased Recycling	• Adopt a zero-waste landfill policy	Medium
		• Implement a composting ordinance	Low
		• Implement a community garden ordinance	Low
GHG Emissions Category: Carbon Sequestration			
Trees & Open Space	Easements	• Encourage conservation easements to retain vegetation that capture and store carbon as they grow	Low
	Shade Trees	• Implement an ordinance requiring new development and/or major renovation projects to plant shade trees • Update City street tree guidelines and/or landscaping ordinances to include planting shade trees where appropriate	Low Low
	Urban Forest	• Implement an urban forestry or City-wide tree planting program	Low

Road Transportation

GHG Reduction Strategy	Strategy Focus Area	Examples of Typical Policies and Actions	Estimated Long-Term GHG Reduction Potential
Increase Zero Emission and/or Alternative Fuels	GHG Emissions Category: Transportation		
	Construction/Landscape/Waste hauler Vehicles/Equipment	- Encourage use of biogas or electric equipment - Mandate conversion of diesel/gasoline construction and/or landscape equipment to biogas or electric	Very low
	Zero Emission/Alternative Fuel Infrastructure	- Identify and prepare city-wide biofuel and charging station siting plan - Install EV charging and other alternative fuel stations - Provide preferred parking for low emission vehicles in parking structures/street parking	Low
	Preferred Parking	Install roundabouts in appropriate areas	Low
Reduce Fuel Use	Transportation Systems Management (TSM)	- TDM outreach and education on options to reduce travel demand - Identify employers to connect to vanpools, carpools through SANDAG iCommute program - Implement and incentivize carpools, vanpools - Increase telecommuting – work with SANDAG to implement - Adopt TDM ordinance specifying trip type goals for new developments	Very low
	Transportation Demand Management (TDM)	- Implement a local shuttle service system in the downtown area to reduce single occupancy vehicle use - Install transit-only lanes - Increase public transit routes and/or route frequency to increase mode share	Low
VMT Reduction	Transit systems	Provide park and ride lots at transit stations and facilitate their use	Low
	Active Transportation (Walking)	- Develop pedestrian plan for more sidewalks - Update trails master plan to increase new connection points and improve accessibility	None
		- Pedestrian improvements (link walkable areas, safety features/shade/crosswalks etc) - Implement pedestrian-only and safe routes to school zones	Low
	Active Transportation (Biking)	Adopt ordinance to require new developments and some retrofits to install bike racks and other supportive amenities like showers	Very low
	Complete Streets	Design streets to provide for all users - cars, bicycles, walkers, and transit users	Low

Building Energy

GHG Reduction Strategy	Strategy Focus Area	Example of Typical	Estimated Long-Term GHG Reduction Potential	
GHG Emissions Category: Energy				
Zero Net Energy	Zero Net Energy (ZNE)	Implement an ordinance requiring new commercial buildings achieve ZNE standards	Medium	Yes
Increase Energy Efficiency / Conserve Energy	Education	- Encourage energy audits in existing homes (single- and multi-family) and commercial buildings upon sale or major renovation - Encourage energy efficiency improvements through rebates or incentives	Very Low Low	No
	Retrofits	- Implement an ordinance requiring energy audits for residential and commercial buildings at time of major renovation or sale - Adopt an energy benchmarking ordinance	Low/Medium Medium	No
	Smart Meters & Appliances	Policies to promote the installation of smart appliances that interface with smart meters at homes and business	Very Low	Yes
	Municipal Retrofits	Use SANDAG Energy Roadmap and implement measures in municipal facilities, such as light replacement programs or more efficient ventilation systems	Low/Medium	Yes
Increase Renewable Energy	Municipal on-site renewable energy	Increase on site renewable energy generation	Low/Medium	Yes
	City-wide renewable supply	Adopt policies to increase renewables in electricity beyond state mandate of 50% by 2030	High	Yes
	Behind the Meter Renewable Supply	Promote PV in existing buildings (residential and non-residential) and surface parking areas, such as to reduce/waive permit fees	Low	Yes
	Water Heating	Require installation of solar or tankless hot water heaters in existing and new residential and non-residential buildings	Low/Medium	Yes

Water, Waste and Carbon Sinks

GHG Reduction Strategy	Strategy Focus Area	Examples of Typical	Estimated Long-Term GHG Reduction Potential	
GHG Emissions Category: Water & Wastewater				
Increase Recycled, Reclaimed & Grey Water	Recycled, Reclaimed & Grey Water	• Adopt an ordinance to facilitate greywater systems (e.g., pre-plumbing requirements for new residential and commercial buildings)	Low	✓
	Outdoor Water Use	• Provide education on pool covers to pool owners • Adopt an ordinance allowing weather-based irrigation systems and encourage installation of rain barrels and rain catchment systems • Update landscape water conservation ordinance including, for example, water budgets	Very low	✓
		• Mandate installation of high efficiency fixtures at time of sale or renovation • Implement an ordinance requiring water use audits at time of sale or major renovation	Low	✓
	Indoor Water Use	• Install high efficiency fixtures at municipal facilities • Hydrozone landscapes at municipal facilities and parks	Low	✓
	Water Utility Improvements	Rate Structures	• Implement water rate increases	Low/Medium
Methane Capture		• Increase methane capture at wastewater treatment plants	Low/Medium	✓
Facility improvements		• Identify water utility efficiencies • Identify and address leaks	Unknown	✓
				Unknown
GHG Emissions Category: Solid Waste				
Solid Waste Reduction & Increased Recycling	Solid Waste Reduction & Increased Recycling	• Adopt a zero-waste landfill policy	Medium	✓
		• Implement a composting ordinance	Low	✓
		• Implement a community garden ordinance	Low	✓
GHG Emissions Category: Carbon Sequestration				
Trees & Open Space	Easements	• Encourage conservation easements to retain vegetation that capture and store carbon as they grow	Low	✓
	Shade Trees	• Implement an ordinance requiring new development and/or major renovation projects to plant shade trees • Update City street tree guidelines and/or landscaping ordinances to include planting shade trees where appropriate	Low	✓
	Urban Forest	• Implement an urban forestry or City-wide tree planting program	Low	✓

Road Transportation

GHG Reduction Strategy	Strategy Focus/Area	Examples of Typical Policies and Actions	Estimated Long-Term GHG Reduction Potential
GHG Emissions Category: Transportation			
Increase Zero Emission and/or Alternative Fuels	Construction/Landscape/Waste hauler Vehicles/Equipment	- Encourage use of biogas or electric equipment - Mandate conversion of diesel/gasoline construction and/or landscape equipment to biogas or electric	Very low
	Zero Emission/Alternative Fuel Infrastructure	- Identify and prepare city-wide biofuel and charging station siting plan - Install EV charging and other alternative fuel stations	Low
	Preferred Parking	- Provide preferred parking for low emission vehicles in parking structures/street parking - Install roundabouts in appropriate areas	None
	Transportation Systems Management (TSM)	Install roundabouts in appropriate areas	Low/Medium
Reduce Fuel Use	Transportation Demand Management (TDM)	- TDM outreach and education on options to reduce travel demand an optimize transportation modes - Identify employers to connect to vanpools, carpools through SANDAG iCommute program - Implement and incentivize carpools, vanpools - Increase telecommuting – work with SANDAG to implement - Adopt TDM ordinance specifying trip type goals for new developments	Very low
	Transit systems	- Implement a local shuttle service system in the downtown area to reduce single occupancy vehicle use - Install transit-only lanes - Increase public transit routes and/or route frequency to increase mode share - Provide park and ride lots at transit stations and facilitate their use	Low
	Active Transportation (Walking)	- Develop pedestrian plan for more sidewalks - Update trails master plan to increase new connection points and improve accessibility	Low/Medium
	Active Transportation (Biking)	- Pedestrian improvements (link walkable areas, safety features/shade/crosswalks etc) - Implement pedestrian-only and safe routes to school zones - Adopt ordinance to require new developments and some retrofits to install bike racks and other supportive amenities like showers	None
VMT Reduction	Complete Streets	Design streets to provide for all users - cars, bicycles, walkers, and transit users	Low

GHG Reduction Strategy	Strategy Focus/Area	Examples of Typical	Estimated Long-Term GHG Reduction Potential
GHG Emissions Category: Energy			
Zero Net Energy	Zero Net Energy (ZNE)	Implement an ordinance requiring new commercial buildings achieve ZNE standards	Medium
Increase Energy Efficiency / Conserve Energy	Education	- Encourage energy audits in existing homes (single- and multi-family) and commercial buildings upon sale or major renovation - Encourage energy efficiency improvements through rebates or incentives	Very Low Low
	Retrofits	- Implement an ordinance requiring energy audits for residential and commercial buildings at time of major renovation or sale - Adopt an energy benchmarking ordinance	Low/Medium Medium
	Smart Meters & Appliances	Policies to promote the installation of smart appliances that interface with smart meters at homes and business	Very Low
	Municipal Retrofits	Use SANDAG Energy Roadmap and implement measures in municipal facilities, such as light replacement programs or more efficient ventilation systems	Low/Medium
Increase Renewable Energy	Municipal on-site renewable energy	Increase on site renewable energy generation	Low/Medium
	City-wide renewable supply	Adopt policies to increase renewables in electricity beyond state mandate of 50% by 2030	High
	Behind the Meter Renewable Supply	Promote PV in existing buildings (residential and non-residential) and surface parking areas, such as to reduce/waive permit fees	Low
	Water Heating	Require installation of solar or tankless hot water heaters in existing and new residential and non-residential buildings	Low/Medium

Water, Waste and Carbon Sinks

GHG Reduction Strategy	Strategy Focus Area	Examples of Typical	Estimated Long-Term GHG Reduction Potential
GHG Emissions Category: Water & Wastewater Increase Recycled, Reclaimed & Grey Water	Water Conservation	- Adopt an ordinance to facilitate greywater systems (e.g., pre-plumbing requirements for new residential and commercial buildings) - Provide education on pool covers to pool owners - Adopt an ordinance allowing weather-based irrigation systems and encourage installation of rain barrels and rain catchment systems - Update landscape water conservation ordinance including, for example, water budgets - Mandate installation of high efficiency fixtures at time of sale or renovation - Implement an ordinance requiring water use audits at time of sale or major renovation	Low
	Outdoor Water Use	- Install high efficiency fixtures at municipal facilities - Hydrozone landscapes at municipal facilities and parks - Implement water rate increases - Increase methane capture at wastewater treatment plants - Identify water utility efficiencies - Identify and address leaks	Very low
	Indoor Water Use	- Implement a composting ordinance - Implement a community garden ordinance	Low
	Municipal Water Use	- Encourage conservation easements to retain vegetation that capture and store carbon as they grow - Implement an ordinance requiring new development and/or major renovation projects to plant shade trees - Update City street tree guidelines and/or landscaping ordinances to include planting shade trees where appropriate - Implement an urban forestry or City-wide tree planting program	Low
	Water Utility Improvements	Implement an ordinance requiring water use audits at time of sale or major renovation	Low
GHG Emissions Category: Solid Waste Solid Waste Reduction & Increased Recycling	Water Conservation	- Adopt an ordinance to facilitate greywater systems (e.g., pre-plumbing requirements for new residential and commercial buildings) - Provide education on pool covers to pool owners - Adopt an ordinance allowing weather-based irrigation systems and encourage installation of rain barrels and rain catchment systems - Update landscape water conservation ordinance including, for example, water budgets - Mandate installation of high efficiency fixtures at time of sale or renovation - Implement an ordinance requiring water use audits at time of sale or major renovation	Low
	Outdoor Water Use	- Install high efficiency fixtures at municipal facilities - Hydrozone landscapes at municipal facilities and parks - Implement water rate increases - Increase methane capture at wastewater treatment plants - Identify water utility efficiencies - Identify and address leaks	Very low
	Indoor Water Use	- Implement a composting ordinance - Implement a community garden ordinance	Low
GHG Emissions Category: Carbon Sequestration Trees & Open Space	Water Conservation	- Adopt an ordinance to facilitate greywater systems (e.g., pre-plumbing requirements for new residential and commercial buildings) - Provide education on pool covers to pool owners - Adopt an ordinance allowing weather-based irrigation systems and encourage installation of rain barrels and rain catchment systems - Update landscape water conservation ordinance including, for example, water budgets - Mandate installation of high efficiency fixtures at time of sale or renovation - Implement an ordinance requiring water use audits at time of sale or major renovation	Low
	Outdoor Water Use	- Install high efficiency fixtures at municipal facilities - Hydrozone landscapes at municipal facilities and parks - Implement water rate increases - Increase methane capture at wastewater treatment plants - Identify water utility efficiencies - Identify and address leaks	Very low
	Indoor Water Use	- Implement a composting ordinance - Implement a community garden ordinance	Low

Road Transportation

GHG Reduction Strategy	Strategy Focus Area	Examples of Typical Policies and Actions	Estimated Long-Term GHG Reduction Potential
GHG Emissions Category: Transportation	Construction/Landscape/Waste hauler Vehicles/Equipment	- Encourage use of biogas or electric equipment - Mandate conversion of diesel/gasoline construction and/or landscape equipment to biogas or electric	Very low Low
	Zero Emission/Alternative Fuel Infrastructure	- Identify and prepare city-wide biofuel and charging station siting plan - Install EV charging and other alternative fuel stations - Provide preferred parking for low emission vehicles in parking structures/street parking	None Low/Medium Low
	Preferred Parking	Install roundabouts in appropriate areas	Low/Medium
	Transportation Systems Management (TSM)	- TDM outreach and education on options to reduce travel demand and optimize transportation modes - Identify employers to connect to vanpools, carpools through SANDAG iCommute program - Implement and incentivize carpools, vanpools - Increase telecommuting – work with SANDAG to implement - Adopt TDM ordinance specifying trip type goals for new developments	Very low Low Low/Medium Medium Low/Medium
VMT Reduction	Transportation Demand Management (TDM)	- Implement a local shuttle service system in the downtown area to reduce single occupancy vehicle use - Install transit-only lanes - Increase public transit routes and/or route frequency to increase mode share - Provide park and ride lots at transit stations and facilitate their use	Low/Medium Low Medium Low/Medium
	Active Transportation (Walking)	- Develop pedestrian plan for more sidewalks - Update trails master plan to increase new connection points and improve accessibility - Pedestrian improvements (link walkable areas, safety features/shade/crosswalks etc) - Implement pedestrian-only and safe routes to school zones	None None Low Low
	Active Transportation (Biking)	Adopt ordinance to require new developments and some retrofits to install bike racks and other supportive amenities like showers	Very low
	Complete Streets	Design streets to provide for all users - cars, bicycles, walkers, and transit users	Low

GHG Reduction Strategy	Strategy Focus/Area	Examples of Typical	Estimated Long-Term GHG Reduction Potential
GHG Emissions Category: Energy			
Zero Net Energy	Zero Net Energy (ZNE)	Implement an ordinance requiring new commercial buildings achieve ZNE standards	Medium
Increase Energy Efficiency / Conserve Energy	Education	- Encourage energy audits in existing homes (single- and multi-family) and commercial buildings upon sale or major renovation - Encourage energy efficiency improvements through rebates or incentives	Very Low Low
	Retrofits	- Implement an ordinance requiring energy audits for residential and commercial buildings at time of major renovation or sale - Adopt an energy benchmarking ordinance	Low/Medium Medium
	Smart Meters & Appliances	Policies to promote the installation of smart appliances that interface with smart meters at homes and business	Very Low
	Municipal Retrofits	Use SANDAG Energy Roadmap and implement measures in municipal facilities, such as light replacement programs or more efficient ventilation systems	Low/Medium
Increase Renewable Energy	Municipal on-site renewable energy	Increase on site renewable energy generation	Low/Medium
	City-wide renewable supply	Adopt policies to increase renewables in electricity beyond state mandate of 50% by 2030	High
	Behind the Meter Renewable Supply	Promote PV in existing buildings (residential and non-residential) and surface parking areas, such as to reduce/waive permit fees	Low
	Water Heating	Require installation of solar or tankless hot water heaters in existing and new residential and non-residential buildings	Low/Medium

GHG Reduction Strategy	Strategy Focus/Area	Examples of Typical	Estimated Long-Term GHG Reduction Potential	
GHG Emissions Category: Water & Wastewater				
Increase Recycled, Reclaimed & Grey Water	Recycled, Reclaimed & Grey Water	• Adopt an ordinance to facilitate greywater systems (e.g., pre-plumbing requirements for new residential and commercial buildings)	Low	N
	Outdoor Water Use	• Provide education on pool covers to pool owners • Adopt an ordinance allowing weather-based irrigation systems and encourage installation of rain barrels and rain catchment systems • Update landscape water conservation ordinance including, for example, water budgets	Very low Low Low/Medium	X X X
	Indoor Water Use	• Mandate installation of high efficiency fixtures at time of sale or renovation • Implement an ordinance requiring water use audits at time of sale or major renovation	Low Low	N N
	Municipal Water Use	• Install high efficiency fixtures at municipal facilities • Hydrozone landscapes at municipal facilities and parks	Low Very Low	N N
	Rate Structures	• Implement water rate increases	Low/Medium	N
Water Utility Improvements	Methane Capture	• Increase methane capture at wastewater treatment plants	Low/Medium	X
	Facility improvements	• Identify water utility efficiencies • Identify and address leaks	Unknown Unknown	
GHG Emissions Category: Solid Waste				
Solid Waste Reduction & Increased Recycling	Solid Waste Reduction & Increased Recycling	• Adopt a zero-waste landfill policy	Medium	X
		• Implement a composting ordinance	Low	
		• Implement a community garden ordinance	Low	
GHG Emissions Category: Carbon Sequestration				
Trees & Open Space	Easements	• Encourage conservation easements to retain vegetation that capture and store carbon as they grow	Low	X
	Shade Trees	• Implement an ordinance requiring new development and/or major renovation projects to plant shade trees • Update City street tree guidelines and/or landscaping ordinances to include planting shade trees where appropriate	Low Low Low	X X X
	Urban Forest	• Implement an urban forestry or City-wide tree planting program	Low	X

Road Transportation

GHG Reduction Strategy	Strategy Focus Area	Examples of Typical Policies and Actions	Estimated Long-Term GHG Reduction Potential
GHG Emissions Category: Transportation			
Increase Zero Emission and/or Alternative Fuels	Construction/Landscape/Waste hauler Vehicles/Equipment	- Encourage use of bio gas or electric equipment - Mandate conversion of diesel/gasoline construction and/or landscape equipment to bio gas or electric	Very low
	Zero Emission/Alternative Fuel Infrastructure	- Identify and prepare city-wide bio fuel and charging station siting plan - Install EV charging and other alternative fuel stations	Low
	Preferred Parking	- Provide preferred parking for low emission vehicles in parking structures/street parking - Install roundabouts in appropriate areas	None
	Transportation Systems Management (TSM)	- Identify EV charging and other alternative fuel stations - Provide preferred parking for low emission vehicles in parking structures/street parking - Install roundabouts in appropriate areas	Low/Medium
Reduce Fuel Use	Transportation Demand Management (TDM)	- TDM outreach and education on options to reduce travel demand and optimize transportation modes - Identify employers to connect to vanpools, carpools through SANDAG iCommute program - Implement and incentivize carpools, vanpools - Increase telecommuting – work with SANDAG to implement - Adopt TDM ordinance specifying trip type goals for new developments	Very low
	Transit systems	- Implement a local shuttle service system in the downtown area to reduce single occupancy vehicle use - Install transit-only lanes - Increase public transit routes and/or route frequency to increase mode share - Provide park and ride lots at transit stations and facilitate their use	Low
	Active Transportation (Walking)	- Develop pedestrian plan for more sidewalks - Update trails master plan to increase new connection points and improve accessibility	Medium
	Active Transportation (Biking)	- Pedestrian improvements (link walkable areas, safety features/shade/crosswalks etc) - Implement pedestrian-only and safe routes to school zones	Low/Medium
VMT Reduction	Complete Streets	- Adopt ordinance to require new developments and some retrofits to install bike racks and other supportive amenities like showers - Design streets to provide for all users - cars, bicycles, walkers, and transit users	None
			None
			Low
			Very low

Is this stake for a group of cities?
 Partnering large transportation companies
 like Amazon, FedEx, UPS to use electric or
 other fuel efficient vehicles? If we can
 pressure them to reduce their carbon footprint,
 it would make a large dent in our GHG
 emissions. (I write this as a mom who heavily
 relies on Amazon Prime but worries about the
 environmental impact of all those delivery trucks)

GHG Reduction Strategy	Strategy Focus Area	Examples of Typical	Estimated Long-Term GHG Reduction Potential	
GHG Emissions Category: Energy				
Zero Net Energy	Zero Net Energy (ZNE)	Implement an ordinance requiring new commercial buildings achieve ZNE standards	Medium	Yes
Increase Energy Efficiency / Conserve Energy	Education	- Encourage energy audits in existing homes (single- and multi-family) and commercial buildings upon sale or major renovation - Encourage energy efficiency improvements through rebates or incentives	Very Low Low	Yes
	Retrofits	- Implement an ordinance requiring energy audits for residential and commercial buildings at time of major renovation or sale - Adopt an energy benchmarking ordinance	Low/Medium Medium	Yes
	Smart Meters & Appliances	Policies to promote the installation of smart appliances that interface with smart meters at homes and business	Very Low	Yes
	Municipal Retrofits	Use SANDAG Energy Roadmap and implement measures in municipal facilities, such as light replacement programs or more efficient ventilation systems	Low/Medium	
	Municipal on-site renewable energy	Increase on site renewable energy generation	Low/Medium	
Increase Renewable Energy	City-wide renewable supply	Adopt policies to increase renewables in electricity beyond state mandate of 50% by 2030	High	YES!!
	Behind the Meter Renewable Supply	Promote PV in existing buildings (residential and non-residential) and surface parking areas, such as to reduce/waive permit fees	Low	
	Water Heating	Require installation of solar or tankless hot water heaters in existing and new residential and non-residential buildings	Low/Medium	Yes

Water, Waste and Carbon Sinks

GHG Reduction Strategy	Strategy Focus Area	Examples of Typical	Estimated Long-Term GHG Reduction Potential
GHG Emissions Category: Water & Wastewater Increase Recycled, Reclaimed & Grey Water Water Conservation	Recycled, Reclaimed & Grey Water	Adopt an ordinance to facilitate greywater systems (e.g., pre-plumbing requirements for new residential and commercial buildings)	Low <i>Yes</i>
	Outdoor Water Use	- Provide education on pool covers to pool owners - Adopt an ordinance allowing weather-based irrigation systems and encourage installation of rain barrels and rain catchment systems - Update landscape water conservation ordinance including, for example, water budgets	Very low Low Low/Medium
	Indoor Water Use	- Mandate installation of high efficiency fixtures at time of sale or renovation - Implement an ordinance requiring water use audits at time of sale or major renovation	Low Low <i>Yes</i>
	Municipal Water Use	- Install high efficiency fixtures at municipal facilities - Hydrozone landscapes at municipal facilities and parks	Low Very Low
	Rate Structures	Implement water rate increases	Low/Medium
Water Utility Improvements	Methane Capture	Increase methane capture at wastewater treatment plants	Low/Medium
	Facility Improvements	- Identify water utility efficiencies - Identify and address leaks	Unknown Unknown
GHG Emissions Category: Solid Waste Solid Waste Reduction & Increased Recycling Increased Recycling	Solid Waste Reduction & Increased Recycling	Adopt a zero-waste landfill policy	Medium <i>Yes</i>
		Implement a composting ordinance	Low <i>Yes</i>
		Implement a community garden ordinance	Low
GHG Emissions Category: Carbon Sequestration Trees & Open Space	Carbon Sequestration	Encourage conservation easements to retain vegetation that capture and store carbon as they grow	Low <i>Yes</i>
		Implement an ordinance requiring new development and/or major renovation projects to plant shade trees	Low
		Update City street tree guidelines and/or landscaping ordinances to include planting shade trees where appropriate	Low <i>Yes</i>
		Implement an urban forestry or City-wide tree planting program	Low <i>Yes</i>

Mid-Range - Manager Planning Dept

Climate Action Plan CAP

Road Transportation

GHG Reduction Strategy	Strategy Focus Area	Examples of Typical Policies and Actions	Estimated Long-Term GHG Reduction Potential
GHG Emissions Category: Transportation			
Increase Zero Emission and/or Alternative Fuels	Construction/Landscape/Waste hauler Vehicles/Equipment	- Encourage use of biogas or electric equipment - Mandate conversion of diesel/gasoline construction and/or landscape equipment to biogas or electric	Yes
	Zero Emission/Alternative Fuel Infrastructure	- Identify and prepare city-wide biofuel and charging station siting plan - Install EV charging and other alternative fuel stations	Yes
	Preferred Parking	Provide preferred parking for low emission vehicles in parking structures/street parking	Yes
	Transportation Systems Management (TSM)	Install roundabouts in appropriate areas	Yes
Reduce Fuel Use	Transportation Demand Management (TDM)	- TDM outreach and education on options to reduce travel demand and optimize transportation modes - Identify employers to connect to vanpools, carpools through SANDAG iCommute program - Implement and incentivize carpools, vanpools - Increase telecommuting – work with SANDAG to implement - Adopt TDM ordinance specifying trip type goals for new developments	Yes
	Transit systems	Implement a local shuttle service system in the downtown area to reduce single occupancy vehicle use	Yes
		Install transit-only lanes	Low
		Increase public transit routes and/or route frequency to increase mode share	Medium
VMT Reduction	Active Transportation (Walking)	Provide park and ride lots at transit stations and facilitate their use	Yes
		- Develop pedestrian plan for more sidewalks - Update trails master plan to increase new connection points and improve accessibility	Yes
		- Pedestrian improvements (link walkable areas, safety features/shade/crosswalks etc) - Implement pedestrian-only and safe routes to school zones	Yes
	Active Transportation (Biking)	Adopt ordinance to require new developments and some retrofits to install bike racks and other supportive amenities like showers	Yes
	Complete Streets	Design streets to provide for all users - cars, bicycles, walkers, and transit users	Low

Building Energy

GHG Reduction Strategy	Strategy Focus Area	Examples of Typical	Estimated Long-Term GHG Reduction Potential	
GHG Emissions Category: Energy				
Zero Net Energy	Zero Net Energy (ZNE)	Implement an ordinance requiring new commercial buildings achieve ZNE standards	Medium	yes
Increase Energy Efficiency / Conserve Energy	Education	- Encourage energy audits in existing homes (single- and multi-family) and commercial buildings upon sale or major renovation - Encourage energy efficiency improvements through rebates or incentives	Very Low Low	no
	Retrofits	- Implement an ordinance requiring energy audits for residential and commercial buildings at time of major renovation or sale - Adopt an energy benchmarking ordinance	Low/Medium Medium	NO
	Smart Meters & Appliances	Policies to promote the installation of smart appliances that interface with smart meters at homes and business	Very Low	yes
	Municipal Retrofits	- Use SANDAG Energy Roadmap and implement measures in municipal facilities, such as light replacement programs or more efficient ventilation systems - Increase on site renewable energy generation	Low/Medium	
Increase Renewable Energy	Municipal on-site renewable energy	Increase on site renewable energy generation	Low/Medium	
	City-wide renewable supply	Adopt policies to increase renewables in electricity beyond state mandate of 50% by 2030	High	yes
	Behind the Meter Renewable Supply	Promote PV in existing buildings (residential and non-residential) and surface parking areas, such as to reduce/waive permit fees	Low	
	Water Heating	Require installation of solar or tankless hot water heaters in existing and new residential and non-residential buildings	Low/Medium	yes

Water, Waste and Carbon Sinks

GHG Reduction Strategy	Strategy Focus Area	Examples of Typical	Estimated Long-Term GHG Reduction Potential
GHG Emissions Category: Water & Wastewater			
Increase Recycled, Reclaimed & Grey Water Water Conservation	Recycled, Reclaimed & Grey Water	• Adopt an ordinance to facilitate greywater systems (e.g., pre-plumbing requirements for new residential and commercial buildings)	Low Yes
	Outdoor Water Use	• Provide education on pool covers to pool owners • Adopt an ordinance allowing weather-based irrigation systems and encourage installation of rain barrels and rain catchment systems • Update landscape water conservation ordinance including, for example, water budgets	Very low Low Low/Medium Yes
	Indoor Water Use	• Mandate installation of high efficiency fixtures at time of sale or renovation • Implement an ordinance requiring water use audits at time of sale or major renovation	Low Low Low NO
	Municipal Water Use	• Install high efficiency fixtures at municipal facilities • Hydrozone landscapes at municipal facilities and parks	Low Very Low Low/Medium Yes NO
Water Utility Improvements	Rate Structures	• Implement water rate increases	Low/Medium Yes
	Methane Capture	• Increase methane capture at wastewater treatment plants	Low/Medium Yes
	Facility Improvements	• Identify water utility efficiencies • Identify and address leaks	Unknown Unknown Yes
GHG Emissions Category: Solid Waste			
Solid Waste Reduction & Increased Recycling	Solid Waste Reduction & Increased Recycling	• Adopt a zero-waste landfill policy	Medium Yes
		• Implement a composting ordinance	Low Yes
		• Implement a community garden ordinance	Low Yes
GHG Emissions Category: Carbon Sequestration			
Trees & Open Space	Easements	• Encourage conservation easements to retain vegetation that capture and store carbon as they grow	Low Yes
	Shade Trees	• Implement an ordinance requiring new development and/or major renovation projects to plant shade trees • Update City street tree guidelines and/or landscaping ordinances to include planting shade trees where appropriate	Low Low Yes and
	Urban Forest	• Implement an urban forestry or City-wide tree planting program	Low Yes

stop down existing trees