Buildings & Energy Strategies

Goals:

1. **Achieve 15 percent energy efficiency in residential buildings from the growth baseline by 2025.**
2. **Achieve 20 percent energy efficiency in commercial buildings from the growth baseline by 2025.**
3. **Increase electricity from renewables from 1.5 to 5 percent of the total consumed by 2025.**

Strategy Cross Cutting (CC) Residential Buildings (R) Commercial Buildings (C) Industrial Buildings (I) Renewable Energy (RE)	**Emissions Reduction Potential** (High, Medium, Low)	**Cost** (High, Medium, Low)	**Timeframe** (0-2 Years, 3-5 Years, 5+ years)	**Political/ Social Feasibility** (High, Medium, Low)	**Disparate Impacts** (by geography, income, etc.) (High, Medium, Low)	**Co-Benefits** (e.g. job creation, public health, better mobility, etc.)
CC1. Launch a City initiative to make Minneapolis the most energy-efficient city in America	H	L	0-2	H/M	M	M
CC2. Ensure that City facilities are models of energy-efficiency and renewable energy technology	H	M/L	0-2	H	L	M
CC3. Support the State's adoption of the latest International Energy Conservation Code (IECC) and International Green Construction Code (IGCC) and adopt the IGCC locally	M	M/L	0-2	M	M	M
CC4. Incentivize energy efficiency in private buildings during every interaction with the City	M	M/L	0-2	H/M	L	M
CC5. Require City-financed projects to meet an energy efficiency standard, like Sustainable Buildings 2030	M/L	L	3-5	M	L	M
CC6. Explore opportunities to restructure the mechanical permit fee schedule and other fee schedules to incentivize energy efficient products and renewable energy	M	L	0-2	M	M/L	M
CC7. Determine the feasibility of establishing conservation-based pricing or structuring of franchise fees and using the franchise agreement to support renewables	M	L	3-5	M	M	M
CC8. Evaluate and expand incentives granted for high energy performance	M	L	0-2	H/M	M/L	M
CC9. Develop tools to finance energy efficiency and renewable energy retrofits for commercial and residential buildings that have low barriers to entry and limited risk for local government	H	H/M	3-5	M	M	H/M
CC10. Support the implementation of the University of Minnesota's Climate Action Plan and encourage other government entities to take action	H/M	M/L	5+	H	L	M

Buildings & Energy Strategies

Strategy Cross Cutting (CC) Residential Buildings (R) Commercial Buildings (C) Industrial Buildings (I) Renewable Energy (RE)	**Emissions Reduction Potential** (High, Medium, Low)	**Cost** (High, Medium, Low)	**Timeframe** (0-2 Years, 3-5 Years, 5+ years)	**Political/ Social Feasibility** (High, Medium, Low)	**Disparate Impacts** (by geography, income, etc.) (High, Medium, Low)	**Co-Benefits** (e.g. job creation, public health, better mobility, etc.)
CC11. Monitor new technologies and regularly reassess strategies. Encourage implementation when feasible	M/L	M	5+	H	L	M
CC12. Identify opportunities to increase conservation efforts within the downtown district heating and cooling system and make the system more efficient using technologies like combined heat and power	H	H/M	3-5	H/M	L	L
CC13. Identify opportunities to expand the use of district heating systems to new and existing buildings	H/M	M/L	0-2	M	L	L
R1. Help 75 percent of Minneapolis homeowners participate in whole-house efficiency retrofit programs by 2025	M	H	5+	H	M	M
R2. Create time-of-sale and time-of-rent energy label disclosure	L	L	3-5	M	M	M/L
R3. Connect and collaborate with other residential energy efficiency efforts	L	M/L	0-2	H	L	M/L
C1. Continue to host an annual Energy Reduction Challenge ("Kilowatt Crackdown") for Commercial Buildings in conjunction with BOMA and other partners	H/M	L	0-2	H	M	M
C2. Implement a Building Energy Disclosure policy for medium and large commercial buildings	M	L	0-2	M	L	M/L
C3. Explore implementation of a commercial asset rating program, such as DOE's Commercial Building Energy Asset Rating	L	M	3-5	M	L	M
C4. Develop "green lease" model language that allows building owners and tenants to share the energy savings from building capital improvements	M	L	0-2	M	L	L
I1. Continue to support a loan program to help businesses including industrial companies to become more energy efficient and expand their businesses	H	M	0-2	H	L	H

Buildings & Energy Strategies

Strategy Cross Cutting (CC) Residential Buildings (R) Commercial Buildings (C) Industrial Buildings (I) Renewable Energy (RE)	**Emissions Reduction Potential** (High, Medium, Low)	**Cost** (High, Medium, Low)	**Timeframe** (0-2 Years, 3-5 Years, 5+ years)	**Political/ Social Feasibility** (High, Medium, Low)	**Disparate Impacts** (by geography, income, etc.) (High, Medium, Low)	**Co-Benefits** (e.g. job creation, public health, better mobility, etc.)
RE1. Continue to identify barriers to distributed renewable energy installation	M	L	3-5	H/M	M	M
RE2. Investigate the feasibility of large-scale renewable energy purchasing for the municipal government and/or residents	H	M	3-5	M/L	M	L

Transportation & Land Use Strategies

Goals:

1. **Reduce automobile vehicle miles** traveled in Minneapolis while improving accessibility, increasing transportation choices, and promoting and accommodating growth.
2. **Support livable, walkable, and growing neighborhoods** that meet the needs of all Minneapolis residents.
3. **Increase the share of Minneapolis residents and workers choosing non-auto modes** for commuting and other trips.
4. Through local action and federal and state legislation, **support a transition to cleaner fuels and more efficient vehicles.**

Strategy PLU = Planning and Land Use TCS = Transit and Car Sharing AT = Active Transportation P = Parking Management TDM = Transportation Demand Management & Intelligent Transportation Systems CF = Clean Fuels O = Other	**Emissions Reduction Potential** (High, Medium, Low)	**Cost** (High, Medium, Low)	**Timeframe** (0-2 Years, 3-5 Years, 5+ years)	**Political/ Social Feasibility** (High, Medium, Low)	**Disparate Impacts** (by geography, income, etc.) (High, Medium, Low)	**Co-Benefits** (e.g. job creation, public health, better mobility, etc.)
PLU1. Improve inter-departmental and inter-agency collaboration on transportation issues, and track progress	M/L	L	0-2	M	L	M/L
PLU2. Plan for and encourage "complete neighborhoods"	H	H	5+	M	L	H
PLU3. Focus growth in and along land use features designated in *The Minneapolis Plan for Sustainable Growth*	M	L	5+	M	M	H
PLU4. Review the zoning code to identify impediments and incentives to the construction and retrofit of green buildings	M	L	0-2	H/M	M	M
TCS1. Support the Metropolitan Council's goal of doubling regional transit ridership by 2030	H	H	5+	M	L	H
TCS2. Support the build-out and upgrade of regional and local transit lines	H/M	H	5+	M	M	H
TCS3. Advocate for an increase to the dedicated funding stream for transit construction and operations at the state level and regional level	M	M	0-2	M	L	M/L
TCS4. Work with Metro Transit and property owners to improve capacity and use of transit during special events	M/L	M/L	0-2	H	L	L

Transportation & Land Use Strategies

Strategy PLU = Planning and Land Use TCS = Transit and Car Sharing AT = Active Transportation P = Parking Management TDM = Transportation Demand Management & Intelligent Transportation Systems CF = Clean Fuels O = Other	**Emissions Reduction Potential** (High, Medium, Low)	**Cost** (High, Medium, Low)	**Timeframe** (0-2 Years, 3-5 Years, 5+ years)	**Political/ Social Feasibility** (High, Medium, Low)	**Disparate Impacts** (by geography, income, etc.) (High, Medium, Low)	**Co-Benefits** (e.g. job creation, public health, better mobility, etc.)
TCS5. Complete the downtown east-west transit spine improvements	M/L	M/L	3-5	H/M	M	M
TCS6. Expand car-sharing services to on-street spaces.	L	L	0-2	H	L	M
TCS7. Make car-sharing convenient and affordable by reducing sales tax on car-sharing products to the minimum rate	L	L	0-2	H	M	L
AT1. Achieve the City's adopted targets for bicycle mode share and bicycle counts and adopt a stretch goal of 15 percent for 2025	H	M	5+	M	L	H
AT2. Construct 30 miles of on-street, protected bike facilities (cycle tracks) by 2020 to allow safe and efficient travel for all types of cyclists	M	M	5+	M	L	H
AT3. Revisit minimum bicycle parking requirements to support the City's bicycle mode share targets	M	L	0-2	H	L	H/M
AT4. Support implementation of the Pedestrian Master Plan and Bicycle Master Plan	H/M	M	5+	H/M	L	H
AT5. Allow special service districts to levy a surcharge on parking meters to fund streetscape improvements	L	L	0-2	M	M/L	M
AT6. Continue "Safe Routes to School" efforts	L	L	0-2	H	L	M
AT7. Adopt a Complete Streets policy	L	L	0-2	H	L	L/M
P1. Investigate demand-based parking pricing strategies for metered areas	M	M/L	0-2	M	L	L

Transportation & Land Use Strategies

Strategy PLU = Planning and Land Use TCS = Transit and Car Sharing AT = Active Transportation P = Parking Management TDM = Transportation Demand Management & Intelligent Transportation Systems CF = Clean Fuels O = Other	**Emissions Reduction Potential** (High, Medium, Low)	**Cost** (High, Medium, Low)	**Timeframe** (0-2 Years, 3-5 Years, 5+ years)	**Political/ Social Feasibility** (High, Medium, Low)	**Disparate Impacts** (by geography, income, etc.) (High, Medium, Low)	**Co-Benefits** (e.g. job creation, public health, better mobility, etc.)
P2. Continue to adjust minimum parking requirements to better promote alternative modes of transportation	M	L	3-5	M	L	M
P3. Support the development of new information technology to reduce “cruising” for parking and make more efficient use of curb and ramp space	M	M	3-5	H/M	M/L	M/L
P4. Support the development of a citywide framework for curb space use	L	L	0-2	M	L	H/M
P5. Require or incent parking "unbundling"	M/L	L	5+	M	L	M
TDM1. Support the Downtown Transportation Management Organization’s goal to reduce 4.8 million drive alone trips by 2015	H	L	3-5	M	L	M
TDM2. Explore changes to signal timing to reduce idling, improve traffic flow, and accommodate non-auto modes	H/M	H/M	0-2	H	L	H/M
TDM3. Support the expansion of congestion pricing, dynamic signage, and other traffic management techniques on regional highways	M/L	H	5+	M/L	M/L	M/L
TDM4. Encourage large employers to embrace alternative work arrangements for employees	H	L	3-5	H/M	L	H
CF1. Explore regulatory incentives to increasing electric vehicle charging infrastructure	M/L	M/L	0-2	H	L	M/L
CF2. Provide electric vehicle charging stations at City-owned facilities where feasible	M/L	M	0-2	H	L	L
CF3. Increase the fuel efficiency of the city’s licensed taxi and car service fleet	M/L	M	3-5	M	M	M

Transportation & Land Use Strategies

Strategy PLU = Planning and Land Use TCS = Transit and Car Sharing AT = Active Transportation P = Parking Management TDM = Transportation Demand Management & Intelligent Transportation Systems CF = Clean Fuels O = Other	**Emissions Reduction Potential** (High, Medium, Low)	**Cost** (High, Medium, Low)	**Timeframe** (0-2 Years, 3-5 Years, 5+ years)	**Political/ Social Feasibility** (High, Medium, Low)	**Disparate Impacts** (by geography, income, etc.) (High, Medium, Low)	**Co-Benefits** (e.g. job creation, public health, better mobility, etc.)
CF4. Support the proposed Federal fuel efficiency improvements	H	L	5+	H	L	M
CF5. Support increased fuel efficiency in public fleets	L	M/L	3-5	H	L	L
CF6. Support state efforts to adopt a low-carbon fuel standard	M	L	5+	M	L	M/L
CF7. Support the development of alternative jet fuels and ensure MSP is prepared for their increased use	H	H	5+	M/L	L	L
O1. Continue to shift to LED streetlights	H	H	3-5	H	L	L
O2. Support continuing efficiency efforts at the Minneapolis-St Paul International Airport	M/L	M	5+	M	L	M/L
O3. Assist the Metropolitan Airports Commission in making MSP the nation's "greenest" airport	H/M	H	5+	M	L	M
O4. Encourage the Metropolitan Airports Commission to expand its use of renewable energy resources	M/L	M/L	0-2	H/M	L	M
O5. Encourage the State of Minnesota to permit the testing of autonomous vehicles on public roadways.	M/L	L	3-5	M	M/L	M

Waste & Recycling Strategies

Goals:

1. Achieve a **zero percent growth rate** in the total waste stream from 2010 levels.
2. **Recycle 50 percent of the waste stream** (commercial and residential) in Minneapolis by 2025.
3. **Increase organics collection to 15 percent** of the waste stream by 2025.
4. Support Metropolitan Council Environmental Service's goal to **reduce energy use by 25 percent below 2006 levels** by 2015.
5. **Increase awareness of the lifecycle impacts** of products to address GHGs occurring outside the community.

Strategy SR = Source Reduction (Reducing Waste) R = Recycling (Increase Recycling) O =Organics (Increasing Organics Collection) L = Lifecycle (Addressing Product Lifecycle Impacts) E = Energy Use/Wastewater (Reducing Wastewater Treatment Impacts)	**Emissions Reduction Potential** (High, Medium, Low)	**Cost** (High, Medium, Low)	**Timeframe** (0-2 Years, 3-5 Years, 5+ years)	**Political/ Social Feasibility** (High, Medium, Low)	**Disparate Impacts** (by geography, income, etc.) (High, Medium, Low)	**Co-Benefits** (e.g. job creation, public health, better mobility, etc.)
SR1. Identify consumer products and packaging that are neither recyclable nor compostable and engage companies, consumers and retailers in a campaign to reduce the disposal of such products and packaging through reuse efforts or switching to alternative materials	H/M	H/M	5+	M	L	M
SR2. Identify and promote reuse and repair businesses and opportunities which can reduce the disposal of used goods	M	L	0-2	M	L	H/M
SR3. Work with Hennepin County and other partner organizations to encourage businesses and residents to purchase reusable goods (Choose to Reuse campaign)	M	L	0-2	H/M	L	M/L
SR4. Expand Green Building programs (such as a requirement for city-financed projects) to promote a reduction in construction and demolition waste	M/L	M	0-2	H/M	L	M
SR5. Expand neighborhood and household organic composting through community initiatives and advocate for updated composting rules at a state level	M/L	M	0-2	H	M	H/M
SR6. Develop innovative marketing and behavioral strategies. For example, clearly label residential garbage carts "Trash for Incineration"	M	M	3-5	H/M	M/L	M
SR7. Undertake a public education campaign to inform residents about opt-out opportunities for material like phone books and junk mail	L	M/L	0-2	H	L	L
SR8. Work with Hennepin County, regional groups and the State of Minnesota to develop better data collection tools and sources, especially for commercial and multifamily waste data	L	M/L	3-5	M	L	M/L

Waste & Recycling Strategies

Strategy SR = Source Reduction (Reducing Waste) R = Recycling (Increase Recycling) O =Organics (Increasing Organics Collection) L = Lifecycle (Addressing Product Lifecycle Impacts) E = Energy Use/Wastewater (Reducing Wastewater Treatment Impacts)	**Emissions Reduction Potential** (High, Medium, Low)	**Cost** (High, Medium, Low)	**Timeframe** (0-2 Years, 3-5 Years, 5+ years)	**Political/ Social Feasibility** (High, Medium, Low)	**Disparate Impacts** (by geography, income, etc.) (High, Medium, Low)	**Co-Benefits** (e.g. job creation, public health, better mobility, etc.)
SR9. Require City-financed development projects to meet a green building standard that includes a waste reduction and/or recycling standard	M	L	0-2	H	L	M/L
R1. Support implementation of a single-sort recycling program for curbside pickup	H	H/M	0-2	H	L	M
R2. Continue to expand the types of materials accepted by the City's recycling program	M	M	0-2	H	L	M/L
R3. Complete a comprehensive assessment of pricing incentives and penalties for residential waste and recycling services and identify strategies that that could increase recycling and reduce waste	M	M	3-5	M	M	M
R4. Enforce the commercial recycling ordinance and undertake an educational campaign to expand recycling options in multi-family housing	H	M	3-5	M	M	M
R5. Identify financial and other barriers to recycling in multi-family buildings (different priorities between property management company and tenants, lack of knowledge of costs, etc.)	M	M	3-5	M	M	M
R6. Work with the County to increase the rate of recycling of construction and demolition debris in the city.	H	M	0-2	M	M/L	M
R7. Support state adoption of the new International Green Construction Code (IGCC) and adopt the IGCC locally (see Buildings & Energy Cross-Cutting Strategy 3)	M	M/L	0-2	M	M	M
O1. Identify major organic waste producers (food service, schools, hospitals, etc.) and conduct a targeted campaign to increase organics recycling	H/M	M	0-2	H	L	H/M
O2. Based on the results of pilot programs, consider expanding the residential organics collection program to more Minneapolis neighborhoods each year	H	H	3-5	H/M	M	M
O3. Support more options for the local processing of organic waste at both large and small scales	M	M	0-2	H/M	L	H

Waste & Recycling Strategies

Strategy SR = Source Reduction (Reducing Waste) R = Recycling (Increase Recycling) O =Organics (Increasing Organics Collection) L = Lifecycle (Addressing Product Lifecycle Impacts) E = Energy Use/Wastewater (Reducing Wastewater Treatment Impacts)	**Emissions Reduction Potential** (High, Medium, Low)	**Cost** (High, Medium, Low)	**Timeframe** (0-2 Years, 3-5 Years, 5+ years)	**Political/ Social Feasibility** (High, Medium, Low)	**Disparate Impacts** (by geography, income, etc.) (High, Medium, Low)	**Co-Benefits** (e.g. job creation, public health, better mobility, etc.)
O4. Make City worksites a model for organics composting by developing a collection program for City-owned and (where possible) City-leased buildings	L	M/L	0-2	H	L	M
L1. Work with Homegrown Minneapolis to incorporate more information on food choice impacts	L	L	0-2	H/M	L	H
L2. Develop educational materials that illustrate the emissions impacts of common products or behaviors, and include these materials in city utility bills	L	L	0-2	H/M	L	L
E1. Work with the Metropolitan Council to achieve their energy use goals and track associated impacts on GHG emissions from Minneapolis contribution to wastewater flows	H/M	M	0-2	M	L	L
E2. Achieve a 75% participation rate in the Community Energy Services program for eligible Minneapolis properties, which includes low-flow water fixture information and installations	H/M	L	5+	H	L	M
E3. Explore options for expanding the use of grey water systems in public and private buildings	M	M	0-2	M	L	M