Minneapolis Energy Systems Pathways

A Framework for Local Energy Action

Mike Bull and Jennifer Edwards
Energy Systems Pathways Study

Energy Vision
- Inventory of City Policies
- Climate Action Plan
- Stakeholder Input

Pathways
- Enhanced Franchise
- Partnerships
- CCA
- Municipal Utility

Programs & Strategies
- Evaluated based on Energy Vision
- Metrics: Cost, Equity, CO2, etc
Pathways Study Consultant Team

Regulatory and Technical Evaluation: Center for Energy and Environment
- Sheldon Strom – President/Founder
- Mike Bull – Policy Director
- Jennifer Edwards – Program Manager
- Carl Nelson – Manager of Residential Programs
- Megan Hoye – Engagement Coordinator
- Clark Koenig – Analyst

Legal Analysis: McGrann, Shea, Carnival, Straughn & Lamb
- Joseph Bagnoli
- Kaela Brennan

Energy Vision: CR Planning
- Brian Ross

Financial Assessment of Municipalization: Campbell Consulting
- Ken Campbell
Context for Today’s Discussion

- City has gained great momentum on energy issues
- Minneapolis Climate Action Plan a significant achievement
- The utility business model is evolving, to be more responsive to customers, communities and to better align with public purposes
- Controversial energy issues unlikely to pass in 2014
- Sustained City involvement at the Minnesota Public Utilities Commission critical
Energy Vision: Development Process

Completed a comprehensive inventory of 21 energy related City policies, plans, resolutions

Interviewed representatives of business, community development, labor, low-income households, neighborhood associations, regulators

Facilitated process with CEAC to review draft Energy Vision and prioritize components

Received and filed by City Council, September 9, 2013
Energy Vision: Statement

“In 2040, Minneapolis’s energy system will provide reliable, affordable, local and clean energy services for Minneapolis homes, businesses, and institutions; sustaining the city’s economy and environment and contributing to a more socially just community.”
## Energy Vision: Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliable and Equitable Energy Services</td>
<td>All residents and businesses are supplied via competitive rates, and disparities in the relative energy costs for low-income households are mitigated.</td>
</tr>
<tr>
<td>Clean Energy</td>
<td>Total carbon emissions and other waste products have substantially declined, with electricity nearly carbon-free by 2040.</td>
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<tr>
<td>Increased Use of Local Resources</td>
<td>A robust local supply chain exists in the City for energy efficiency and renewable energy services, and the City is a national leader in advanced energy infrastructure.</td>
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<td>Market Integration of Efficiency</td>
<td>Residents are empowered to save money and reduce their environmental impact, through the use of transparent data in economic and purchasing decisions.</td>
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<tr>
<td>Collaborative Progress</td>
<td>Planning and investment decisions are achieved through a collaborate process and reflect the City’s climate, economic development and social equity goals.</td>
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Pathways: Status Quo not an Option

• Status Quo:
  • City and Utilities plan and act independently, except on an ad hoc basis. Only significant relationship is the Franchise Agreement.
  • A Franchise Agreement is limited to issues related to use of public rights of way for utility infrastructure, and has been long term.

• The status quo will not allow the City to meet its energy goals
• To reach those goals, the City will need additional influence or control over energy services within the City
# Pathways: Descriptions

<table>
<thead>
<tr>
<th>Pathway</th>
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</table>
| Pathway 1: Enhanced Franchise Agreement | - Broader franchise agreement than traditional (Needs legislative authorization) *Or*  
- Traditional franchise agreement with separate agreement on clean energy issues (Does not need legislation) |
| Pathway 2: City-Utility Partnerships | - Formal ongoing collaboration between City and utilities  
- Not a partnership in legal sense, but emphasizes the City and utilities must act as willing partners to achieve shared goals. |
| Pathway 3: Community Choice Aggregation | - City takes over arranging for power supply  
- Utility continues to own distribution infrastructure and deliver service to customers within City |
| Pathway 4: Municipalization    | - City acquires distribution infrastructure and takes over all aspects of utility service  
- Creates City-owned and operated utility |
# Pathways: Four Pathways for Evaluation

<table>
<thead>
<tr>
<th>Pathway</th>
<th>City’s Involvement with Energy Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pathway 1: Enhanced Franchise Agreement</td>
<td>City</td>
</tr>
<tr>
<td></td>
<td><strong>Utility</strong></td>
</tr>
<tr>
<td></td>
<td>Use of Public Rights of Way</td>
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<tr>
<td></td>
<td>Clean Energy Programs</td>
</tr>
<tr>
<td></td>
<td>Reliability Reporting</td>
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<td></td>
<td>Infrastructure Investments</td>
</tr>
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<td></td>
<td>Shorter Term (5 -10)</td>
</tr>
<tr>
<td>Pathway 2: City-Utility Partnerships</td>
<td>City</td>
</tr>
<tr>
<td></td>
<td><strong>Utility</strong></td>
</tr>
<tr>
<td>Pathway 3: Community Choice Aggregation</td>
<td>City</td>
</tr>
<tr>
<td></td>
<td><strong>Utility</strong></td>
</tr>
<tr>
<td>Pathway 4: Municipalization</td>
<td>City</td>
</tr>
<tr>
<td></td>
<td><strong>Utility</strong></td>
</tr>
</tbody>
</table>

*Pathways are presented by the Center for Energy and Environment*
<table>
<thead>
<tr>
<th>Pathway 1</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Enhanced Franchise Agreement</strong></td>
<td>• Near-term actionability</td>
<td>• No on-going coordination function between the City and utilities</td>
</tr>
<tr>
<td></td>
<td>• Addresses broader set of goals and issues than traditional agreement</td>
<td>• Does not provide the City full control over energy services.</td>
</tr>
<tr>
<td></td>
<td>• City continues to benefit from existing utility expertise and experience</td>
<td>• City still reliant on utilities to plan and implement clean and low-income energy actions</td>
</tr>
<tr>
<td></td>
<td>• Legislation not required, if separate agreement</td>
<td>• Legislation required if single, broader, franchise agreement</td>
</tr>
<tr>
<td>Pathway 2</td>
<td>Advantages</td>
<td>Disadvantages</td>
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<tr>
<td>-----------</td>
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</tbody>
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| City-Utility Partnerships | • Near-term actionability  
• Addresses broader set of goals and issues than status quo  
• Allows the City to deeply engage in planning and coordination  
• Creates opportunities to combine City assets (regulatory & relationship) with utility funding and expertise  
• City continues to benefit from existing utility expertise and experience | • Does not provide the City full control over energy services.  
• City still reliant on utilities to implement clean and low-income energy actions  
• May require legislation to authorize establishment of stand-alone partnership (Not needed if created by agreement) |
<table>
<thead>
<tr>
<th>Pathway 3</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Choice Aggregation</td>
<td>• Allows City to arrange for any desired clean energy supply mix for residents and businesses in the City</td>
<td>• Requires major legislative and regulatory scrutiny and reform</td>
</tr>
<tr>
<td></td>
<td>• Does not require City control and management over energy delivery</td>
<td>• Does not necessarily address efficiency or low-income energy programs</td>
</tr>
<tr>
<td></td>
<td>• City continues to benefit from existing utility expertise and experience for energy delivery</td>
<td>• May increase cost of energy services within City</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Increased City exposure to external risk</td>
</tr>
<tr>
<td>Pathway 4</td>
<td>Advantages</td>
<td>Disadvantages</td>
</tr>
<tr>
<td>-----------</td>
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| **Municipal Utility** | • Provides City full control over clean energy supply mix  
• Full control over efficiency and low-income programs in the City  
• Easier to accommodate evolving policy priorities | • Substantial delay in implementation, due to regulatory and legal process  
• Increased cost of energy services within City  
• Significantly increased City exposure to external risk  
• Loss of utility experience and expertise, funding |
Energy Pathway Options

- Formation of a Municipal Utility
- Community Choice Aggregation
- City-Utility Partnerships
- Enhanced Franchise Agreement
- Status Quo

Dimensions:
- City Responsibility & Control
- Time & Resources to Implement
Near Term: Dual Strategy, blending Pathways 1 and 2

Franchise Agreements
- Focused on use of public rights of way
- Shorter term, with possible renewal
- Broadened to include targeted related issues such as reliability reporting, infrastructure investment

Clean Energy Agreements
- City agrees not to municipalize during term of the agreement, in exchange for utility commitments in meeting City energy goals
- Use agreement to form City-utility Clean Energy Coordinating Partnership to jointly plan and prioritize clean energy activities in the City

Negotiated and Signed Together!
Pathways: Recommendations

Longer Term: CCA and Municipalization

<table>
<thead>
<tr>
<th>Pathway 3</th>
<th>Community Choice Aggregation</th>
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</thead>
<tbody>
<tr>
<td>• Support legislation for state evaluation of CCA</td>
<td></td>
</tr>
<tr>
<td>o Rate impacts, supply mix, local resource development, etc. in other states</td>
<td></td>
</tr>
<tr>
<td>o Barriers to implementation in fully regulated state like Minnesota</td>
<td></td>
</tr>
<tr>
<td>o Provide recommendations</td>
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<thead>
<tr>
<th>Pathway 4</th>
<th>Municipalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Continue to support legislation to strike lost revenues from current utility compensation law regarding municipal acquisition of utility infrastructure</td>
<td></td>
</tr>
<tr>
<td>• If continued interest in forming a municipal utility, seek robust feasibility study to build on Pathways financial assessment</td>
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Near-Term Program Opportunities

**City Assets**
- Energy upgrade requirements
- Disclosure and Information Requirements
- Existing Outreach Networks
- Skilled Residents and businesses

**Utility Assets**
- Technical Resources
- Existing Program Channels
- Energy Data
- State Policy Incentives
- Funding
Commercial & Institutional Programs and Strategies

- Large Commercial Buildings
- Public Building Energy Partnership
- Streetlights
- Small Business Efficiency Programs
Residential Programs and Strategies

- Rental Energy Efficiency Program
- Green Zones Neighborhood Pilot
- Neighborhood-Focused Program Delivery Strategies
- Home Energy Performance Certificate

Credit: Jenni Konrad via cc
Renewable Energy Programs

- Local Solar Development
- Expanded Green Tariff
- Expand Combined Heat and Power Opportunities
- Innovative Energy Supply Arrangements
Estimated Carbon Reductions in 2025
Program Evaluation Components

- Equity
- Carbon Savings
- Affordability
- Energy Savings
- Reliability
- Economic Development
- Renewable Energy
Next Steps: Summary

• Renew the City’s utility franchise agreements with targeted enhancements, and for shorter terms
• Pursue broader “Clean Energy Agreements” with utilities that form Clean Energy Coordinating Partnerships
• Leverage City and utility assets to develop programs that meet the City’s energy sustainability goals
• Engage in state energy policy decisions that can improve the City’s ability to meet energy goals
• Continue to pursue mid- and long-term options for increasing the City’s control over its energy future
THANK you!

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## Pathways: Cost of Municipal Utility

<table>
<thead>
<tr>
<th></th>
<th>Low Cost ($/kWh)</th>
<th>Mid Cost ($/kWh)</th>
<th>High Cost ($/kWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Municipal utility total revenue requirement</td>
<td>0.104</td>
<td>0.141</td>
<td>0.196</td>
</tr>
<tr>
<td>Less franchise fees</td>
<td>(0.004)</td>
<td>(0.004)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>Less debt service on compensation to Xcel Energy for revenue loss and re-integration</td>
<td>(0.006)</td>
<td>(0.024)</td>
<td>(0.051)</td>
</tr>
<tr>
<td>Adjusted muni. utility revenue requirement</td>
<td>0.094</td>
<td>0.113</td>
<td>0.141</td>
</tr>
<tr>
<td>Xcel Energy's overall weighted-average retail electric rate</td>
<td>0.092</td>
<td>0.092</td>
<td>0.092</td>
</tr>
<tr>
<td>Difference between adjusted municipal utility revenue requirement and Xcel Energy's average rate</td>
<td>0.002</td>
<td>0.021</td>
<td>0.049</td>
</tr>
</tbody>
</table>
Traditional Franchise Agreement Topics

- Right and privilege to operate and maintain utility within city limits
- Right to occupy and use the public ways and public grounds within city limits
- Franchise Fee
- Right of Way Placement / Field Locations
- Right of Way Management
- Undergrounding of certain facilities
- Reports/records
- Relocation of certain facilities
- Abandoned Infrastructure
- Vacation of public ways
- Tree-trimming
- Street Lights
- Erosion Control Management
- Restoration
- Permits
- Graffiti
- Customer Service
- Project Management
- Contractor Management

Potential Franchise Agreement Topics

- Distribution Infrastructure Projects (planning & investment)
- Community Engagement
- Outage Reporting
Clean Energy Coordinating Partnership

Municipality

Energy Utility

City
Regulatory
and
Relationship
Assets

Utility
Expertise
and
Program
Funding

Clean Energy Coordinating Partnership
Planning and Coordination of Clean Energy Activities