MINUTES OF THE SPECIAL MEETING OF THE AMES CITY COUNCIL

AMES, IOWA **APRIL 18, 2023**

The Special Meeting of the Ames City Council was called to order by Mayor John Haila at 6:00 p.m. on the 18th day of April, 2023, in the City Council Chambers in City Hall, 515 Clark Avenue, pursuant to law. Present were Council Members Bronwyn Beatty-Hansen, Gloria Betcher, Amber Corrieri, Tim Gartin, Rachel Junck, and Anita Rollins. *Ex officio* Tabitha Etten was absent.

ORDINANCE FOR GEOTHERMAL SERVICE: RATES, CHARGES, OWNERSHIP, AND REPAIR OF SERVICE CONNECTIONS FOR THE BAKER SUBDIVISION: Moved by Beatty-Hansen, seconded by Junck, to approve RESOLUTION NO. 23-220 directing staff to draft an ordinance for Geothermal Service: rates, charges, ownership, and repair of service connections for the Baker Subdivision.
Roll Call Vote: 6-0. Resolution declared adopted unanimously, signed by the Mayor, and hereby made a portion of these Minutes.

WORKSHOP ON CLIMATE ACTION PLAN: Assistant City Manager Deb Schildroth introduced the project team for the Climate Action Plan (CAP) consisting of herself, Public Relations Officer Susan Gwiasda, Director of Electric Services Donald Kom, and Sustainability Coordinator Merry Rankin. She recognized that several members of the Supplemental Input Committee were in the audience before introducing Sustainability Solutions Group (SSG) consultants Naomi Devine, Erik Frenette, and Yuill Herbert.

Consultant Devine presented the project overview, noting the significant amount of work accomplished in the past two years. She highlighted the iterative nature of the planning process, which incorporated feedback from staff, the City Council, the Supplemental Input Committee, and the public. The original aspirational goal set by the City Council was 83% reduction of base year emissions by 2030 and Net Zero (NZ) by 2050. She emphasized that climate action planning provided the "what" and "why," while the implementation strategy addressed the "how."

Consultant Frenette explained that the modeling results identified a 70% reduction by 2030 and 94% reduction by 2050, meaning greenhouse gas (GHG) emissions in 2030 would be 4.8 tonnes per capita, while GHG emissions in 2050 would be 0.8 tonnes per capita. This did not quite meet the aspirational goal of an 83% reduction by 2030 and NZ by 2050. Factors slowing progress included the transportation sector and ongoing emissions in the electric grid.

Consultant Frenette then reviewed the Six Big Moves: (1) Renewable Energy Generation, (2) Building Retrofits Program, (3) Net-Zero New Construction, (4) Reduce Vehicle Emissions, (5) Increase Active Transportation and Transit Use, and (6) Reduce Waste Emissions. He presented images showing the cumulative impact of the Six Big Moves on emissions reductions, noting the biggest impact as Renewable Energy Generation, followed by Building Retrofits Program and Net-Zero New Construction. Consultant Frenette framed the CAP as an investment that would have returns, illustrating how capital expenditures early in the process pay off in the form of cost savings for energy, operations, and maintenance. He identified 2036 as the undiscounted break-even year.

Presenting the summary of financial results, Consultant Frenette noted that SSG modeled the Low-Carbon Scenario (LCS) with both undiscounted financials and with a 3% discount rate. He explained that it is an industry standard to use a discount rate when calculating and evaluating investments. Discount rates capture the opportunity cost of investing and the general preference for gaining returns on investment sooner rather than later. Consultant Frenette observed that using a discount rate was a more conservative approach than undiscounted calculations, because it discounts expected returns on investment down the line, when climate investments really start to pay off. In the Ames CAP, the total savings associated with the CAP between 2023 and 2050 were $3 billion when calculated without a discount rate. However, the 3% discount rate put the total savings at $1.5 billion. The undiscounted total capital investment between 2023 and 2050 was $3.2 billion, while the 3% discount rate put that total investment at $2.4 billion. This shows that discounting impacted the savings significantly more than the capital investments. Thus, discounting the longer-term savings yielded a higher net cost calculation. Consultant Frenette clarified that the report includes data for both discounted and undiscounted calculations.

The Inflation Reduction Act (IRA) of 2022 made the single largest investment in climate and energy in American history, according to Consultant Frenette. The IRA had a cumulative potential of $770 million in climate funding for Ames from 2023-2050. He noted that the Ames CAP included the first analysis of the impact of the IRA for a municipal CAP in the nation.

Consultant Frenette then addressed the financial breakdown for the actions within the Six Big Moves. The data presented examined cumulative emissions reductions, proportion of total reduction, net present value, and marginal abatement cost for the actions. Large-scale renewable electricity generation stood out, comprising 21% of the proportion of total emissions reduction with a marginal abatement cost of $155 per tonne of carbon dioxide (CO_2) equivalent. In contrast, home retrofits made up 5% of the total reduction, but cost $562 per tonne.

The Implementation Strategy for enacting the goals of the CAP was next addressed by Consultant Frenette. He explained that the whole community shared responsibility for the Low Carbon Actions discussed earlier. On the other hand, the Implementation Plan was specific to the City of Ames, providing guidance on initiatives to support the broader roadmap of the Six Big Moves. Consultant Frenette emphasized the importance of incremental progress to build momentum.

The first Big Move addressed by Consultant Frenette was the Building Retrofits Program. The net cost for this category was $930 million, providing 15% of cumulative emissions reductions. Promoting heat pumps would involve financial incentives, creating a repository of vendors and installers, contractor training, and resident feedback. A pilot retrofit program focused on older homes would provide useful information for a larger-scale program. Consultant Frenette also noted the goal of retrofitting municipal buildings by 2030 and partnering with a community loan provider. He introduced the potential of a Neighborhood Finance Association (NFA), which provides loans for energy upgrades and home improvements at low to no cost. Such programs were currently available in Des Moines and Cedar Rapids. The IRA also allocates significant funding for retrofit projects involving electrification.

Renewable Energy Generation, the second Big Move discussed by Consultant Frenette, came at a net cost of $850 million and comprised 47% of total emissions reductions. Implementation would involve increasing ground mount solar and wind generation through power purchasing agreements and through City-owned generation. Promoting rooftop solar would involve offering incentives for solar on new and existing buildings, ideally partnered with a non-profit loan provider. Consultant Frenette also raised the possibility of starting a Solar Group Buy program with Midwest Renewable Energy Association (MREA).

Consultant Frenette noted that Net-Zero New Construction, the third Big Move, had a net cost of $180 million, making up 3% of total emission reductions. Implementation for this move focused on zoning code requirements and tax incentives for new NZ buildings. Other implementation steps included making all new municipal buildings NZ starting in 2025, offering training for builders in NZ design principals, and energy use disclosure for large new buildings.

The fourth Big Move that Consultant Frenette reviewed was Reducing Vehicle Emissions, which had net savings of $960 million making up 4% of total emissions reductions. Implementation steps included education about the IRA Clean Vehicle credit, a municipal policy for new vehicle purchases, electric vehicle (EV) infrastructure policies, and supporting CyRide decarbonization.

Consultant Frenette explained that Active Transportation and Transit Use, the fifth Big Move, had a net savings of $660 million while making up 3% of total emissions reductions. Steps to implement this goal involved working with Iowa State University (ISU) to introduce a bikeshare program, improving and expanding active transportation infrastructure, creating CyRide bus pass partnerships with large employers, and creating car-free zones.

Reducing Waste Emissions, the sixth Big Move, made up 3% of total emissions reductions. The pathway to implementation for this goal involved an organized garbage collection system, education on composting and waste reduction, and implementing an alternative waste-to-energy system allowing refuse to be combusted in a separate boiler.

The consultants invited questions from the City Council about the presentation. Discussion ensued about the feasibility of phasing out nearly all natural gas use by 2028. Consultant Frenette noted that achieving this target would require aggressive phasing out of natural gas, supplemented by renewable natural gas (RNG). Director Kom explained for Council Member Gartin that RNG is essentially methane that results from decomposition of organic matter. A small amount is produced at the Water Pollution Control Facility in Ames as community waste is processed, but it is difficult to find large amounts of RNG. Director Kom identified three options for the Electric Utility to do their part in meeting this target: (1) continue burning natural gas and switch to RNG, (2) switch to a separate Refuse-Derived Fuel (RDF) boiler, and (3) drastically reduce the amount of RDF brought to the plant so that natural gas would not be required to burn it. Mayor Haila pointed out that the target was for the entire community, so Alliant would have to reduce reliance on natural gas as well. Mayor Haila flagged a potential equity concern with relying on RNG, noting that its higher cost could drive up utility rates and disproportionately impact underresourced community members.

Mayor Haila emphasized the importance of making the assumptions behind the modeling clear to ensure that the objectives were achievable. Consultant Frenette clarified for Mayor Haila that costs for electric infrastructure upgrades were not factored into the model because the model compares a Low-Carbon Scenario with Business as Planned (BAP), and upgrades to electric infrastructure would be necessary in BAP. Thus, those upgrades would not represent an additional cost compared to BAP. Director Kom clarified for Mayor Haila that a study on the capacity of the electric grid to handle widespread conversion to heat pumps had not yet been conducted. He noted that heat pumps were more efficient than air conditioners, so electric consumption in the summer would go down, while consumption would increase in the winter as heat pumps replaced natural gas furnaces. Director Kom also clarified for Council Member Gartin that the natural gas boilers in the Power Plant would be maintained for emergencies and Midcontinent Independent System Operator (MISO) capability requirements, but would run much less as wind and solar generation increased.

Discussion ensued regarding strategies for influencing residential, commercial, and industrial use of natural gas. Consultant Devine explained for Council Member Gartin that other cities have created formal partnerships with interested parties in their communities to sign on to the CAP and take responsibility for actions in their sectors. Council Member Beatty-Hansen emphasized that the City should act as a conduit. Creating directories of service providers and connecting people with available rebates and incentives like those in the IRA would make a significant difference. Consultant Devine noted that the leadership of the City could demonstrate possibility and support progress in other sectors to build momentum. Sustainability Coordinator Rankin shared that ISU has its own CAP and recently switched from coal to natural gas. She noted that reports on opportunities for further emission reductions at ISU would be coming soon.

Reviewing the year-over-year LCS investments and returns, Consultant Frenette clarified for Mayor Haila that this particular chart did not include financing, but the report did include an amortized graph. Consultant Herbert explained for Mayor Haila that the industry standard was to exclude inflation from calculations as it can have an extreme distortionary effect, so the model presented did not account for inflation. Consultant Herbert noted an encouraging data point, stating that the annual cost of the CAP would be 0.15% of the estimated Gross Domestic Product (GDP) of Ames. Many other municipalities faced costs of 5-10% of their GDPs for similar CAPs. He clarified for Mayor Haila that this GDP was downscaled from reports on the GDP of Iowa as a whole. In response to questions from Council Member Betcher and Mayor Haila, Consultant Herbert stated that the "out of pocket" cost for the CAP was $3.2 billion, but that number did not factor in discount rates, inflation, or IRA savings.

Regarding projected IRA savings, Council Member Betcher expressed concern that the IRA may not endure past changes in the political composition of the federal government. Consultant Devine affirmed this as an important consideration but also expressed confidence that the 15-year trend of a variety of new funding programs starting up would continue. Council Member Gartin expressed skepticism that a city of less than 70,000 people would receive $770 million in federal funding. Consultant Frenette pointed out that there was even more funding in the IRA that was not included in the model, such as funding for electric buses and utilities. Council Member Betcher suggested considering the IRA funding as aspirational. Consultant Herbert noted that Ames was well-positioned to take advantage of IRA funding because Ames was the first municipality in the country to conduct a quantified analysis of the IRA and its impacts for the City.

Council Member Gartin requested that the consultants provide an estimate of the cost per capita of the CAP. Consultant Herbert noted that such a calculation was complicated. He also offered to

Council Member Gartin examples of several municipalities whose CAP had a similar cost, including Lakewood, Ohio, Tacoma, Washington, and Bellingham, Washington. Consultant Herbert pointed out that $3.2 billion of capital investments over 27 years would be invested one way or another, and the function of the CAP was to push those investments toward options that reduced emissions. He emphasized CAP investment as an economic development opportunity while recognizing the challenges of figuring out the best way to finance the projects.

Council Member Gartin inquired about the average cost to retrofit a typical residential home. Consultant Frenette identified $50,000 for a 50% reduction in energy as a standard cost, which often includes changes like air sealing, improved insulation, and improved windows and doors. In response to Mayor Haila, Consultant Frenette noted that, although retrofits had a high price tag for a small percentage of total reduction, they functioned as an enabler for realizing the full value of other changes. Switching to heat pumps would reduce direct fossil fuel emissions, but the full benefit would only be realized as the electric grid was decarbonized. In response to a question from Mayor Haila about how NFAs sourced their funding for energy upgrade loans, Assistant City Manager Schildroth explained that NFAs operate as a partnership with banks, lending institutions, and municipal and county funding. Consultant Frenette added that the IRA offered a max consumer rebate of $14,000 for qualified electrification projects, which would help offset the cost of retrofits.

Council Member Betcher inquired about the path to retrofitting municipal buildings. City Manager Steve Schainker explained that hiring a consultant to analyze the options would be the next step, noting that financing could be a challenge depending on how the state legislature categorized retrofits. He also observed that the City asked consultants designing new municipal buildings to consider energy efficiency and NZ readiness.

Discussion about Renewable Energy Generation focused on ground solar. Director Kom reported that staff was in the proposal process for rooftop solar on municipal buildings, and identified the closed landfill as a site with additional solar potential. Both options would add power generation to land that could not be used for a different purpose. Director Kom noted that the City was partnering with ISU in their exploration of the possibility of growing crops underneath ground-mounted solar panels. In response to an inquiry from Council Member Betcher, Director Kom explained that the infrastructure required to install solar panels over parking lots would be quite difficult.

While cities are not allowed to set standards stricter than the state building code, City Manager Schainker explained that contract-free zoning may be an option to promote NZ New Construction. Consultant Herbert shared that other municipalities implemented zoning code requirements in phases to allow the building industry to adapt incrementally, reducing the initial costs of the change and making green development the standard. Consultant Frenette explained for Mayor Haila that NZ New Construction had a price premium of up to 12%, depending on the building type. Assistant City Manager Schildroth identified the importance of clarifying what the City means by NZ, as that term can encompass different standards with varying costs. In response to concern about housing costs expressed by Mayor Haila and Council Member Gartin, Consultant Devine emphasized the long-term energy and maintenance cost savings of NZ buildings. Consultant Herbert added that NZ New Construction price premiums usually included the cost of solar installation. If the grid was decarbonized, solar installation would not be necessary for the home to be NZ ready, which would reduce costs significantly. Council Member Gartin expressed concern that the costs would make Ames less competitive when there was already a housing shortage. Mayor Haila noted the ongoing challenge of balancing competing goals.

Transportation was a category characterized by net savings rather than net costs, explained Consultant Frenette. Mayor Haila pointed out that CyRide was projected to have 17 electric buses in a fleet of 100 by 2050. Consultant Frenette stated that the model assumes either 100% electric buses or use of alternative fuels for any non-electric buses by 2050. Council Member Gartin questioned the feasibility of car-free zones that did not discriminate against mobility-impaired residents. Consultant Frenette affirmed the importance of considering equity and inclusion in any implementation strategy, and Consultant Devine shared that car-free zones could create new opportunities for local businesses by opening up space for patios.

On the topic of Reducing Waste Emissions, Consultant Frenette clarified for Council Member Rollins that the model included the cost of building a new waste-to-energy facility. He assured the Council Members that waste diversion was addressed in the report.

Council Member Gartin identified that the discussion had not covered potential tax and utility rate increases associated with the CAP as a whole. City Manager Schainker stated that electricity rates and property taxes would likely increase, but emphasized the benefit to the environment as worthy of consideration. The levelized costs approach to capital improvements would help to keep cost increases incremental and manageable. He explained that staff would develop a chart mapping the Six Big Moves, associated action steps, and sources of funding to illustrate the options of where to focus and at what level. City Manager Schainker stated that the City would probably not be able to do it all, but the costs would become clearer as the next steps provided further information.

Reflecting on the overall approach to CAP implementation, Council Member Gartin inquired whether the City Council intended to approach it incrementally, limited by affordability, or aggressively, regardless of cost. City Manager Schainker encouraged the City Council to be aggressive within parameters of cost, legal limits, and feasibility. Mayor Haila stated that the CAP was not a Capital Improvements Program (CIP), but rather an aspirational strategy to show the possibilities of how to get to the emissions reduction goal. He shared his assessment that the City would not be able to meet the 2030 targets, but the City could try to do as much as possible to get to that point. Public engagement to collect feedback on what to do and how to do it would be crucial. Council Member Beatty-Hansen built on Mayor Haila's comments, emphasizing that costs are distributed across the entire community. She stressed that a large part of the role of the City would be serving as a conduit for people interested in taking steps on their own, connecting people with external funding and building directories of service providers. Cataloging complicated systems and making existing resources accessible would go a long way, she continued.

City Manager Schainker reminded the City Council that adopting the CAP was not a commitment to specific actions. Rather, the CAP would establish the process of developing an annual action plan in which specific costs were quantified. Each year, the City Council would determine what was achievable. Assistant City Manager Schildroth added that the City could adjust to new challenges and opportunities in the annual action plans. Council Member Rollins stated that scaling back to achievable steps was not abandoning the aspirational goals originally set by the City

Council. She compared the City to a driver trying to figure out how to get to a destination. The CAP developed with SSG identified the road for the City to travel to that destination. With the plan in place, the City could now decide how far and how fast to go along the road.

Assistant City Manager Schildroth shared that staff was seeking additional input from the public. She stated that the CAP report would be available on the City website, and feedback could be submitted to sustainability@cityofames.org. After May 10^{th}, 2023, the input collected would be shared with SSG for inclusion in the final CAP. Mayor Haila clarified that the City Council still welcomed feedback at that email address until the final version of the CAP was presented for adoption.

DISPOSITION OF COMMUNICATIONS TO COUNCIL: Mayor Haila noted four dispositions to the City Council.

The first item was an email from Lisa Hovis, building owner of 317 Main Street, requesting amendments to the noise ordinance.
Moved by Gartin, seconded by Beatty-Hansen, to have staff contact Ames Main Street to work with the involved parties to try to come to a resolution before considering amendments to the ordinance.
Vote on Motion: 6-0. Motion declared carried unanimously.

An email from David Blakeley and Joel Paulson regarding paved parking at 2803 West Street was the second item.
Moved by Betcher, seconded by Beatty-Hansen, to request a memo from staff with more information on the issue.
Vote on Motion: 6-0. Motion declared carried unanimously.

The third and fourth items were emails from Kurt Friedrich, President of R. Friedrich and Sons, Inc. Mayor Haila stated that a letter on a related topic would be included in the packet for April 25^{th}, 2023.
Moved by Gartin, seconded by Rollins, to defer discussion of the two emails from Kurt Friedrich until April 25^{th}, 2023.
Vote on Motion: 6-0. Motion declared carried unanimously.

COUNCIL COMMENTS: Mayor Haila recognized the workshop as a great example of the work staff does.

ADJOURNMENT: Moved by Betcher, seconded by Rollins, to adjourn the meeting at 8:27 p.m.
Vote on Motion: 6-0. Motion declared carried unanimously.

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Jeramy Neefus, Principal Clerk

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John A. Haila, Mayor

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Renee Hall, City Clerk