



Dynamhex is pleased to submit this proposed scope of work and budget estimate to conduct the City of Roeland Park's dynamic greenhouse gas (GHG) study and climate action implementation. We understand that this letter may be intended to inform any upcoming budgeting process and are excited for the continued opportunity to support your sustainability efforts.

Outlined below are the proposed tasks based on our understanding of the City's needs as well as a proposed schedule and fee estimate.

- Task 1. **Estimate and visualize municipal and City-wide GHG footprint**

Assessment will be based on the emissions sources identified in the baseline municipal and city-wide GHG Inventories. Dynamhex will work with City staff to explain model and collect any updated use data for the most recent complete year of available data. For inventory consistency, the data collected will be used to estimate emissions generally accepted greenhouse-gas emissions methodology protocols. Data collection and calculated emissions will be available in the Dynamhex software platform (with option to download Excel-based spreadsheet tool(s)) on the completion of the project, as well as a cloud-based public dashboard.

- Task 2. **Plan impactful climate strategies – Emissions reduction roadmap**

Under this task, Dynamhex will support the digital review of the municipal inventory results and coordinate with and interpret to the City of Roeland Park staff, to better understand emission trends, evaluate low-cost, yet high impact strategies, and communicate this near-real time to key civic stakeholders.

- Task 3. **Geospatial analytics and implementation of climate strategies**

Dynamhex will develop a public facing dashboard outlining the climate action plan and portals for area residents and local businesses to sign up. This tool is a much more accessible and personalized platform that intuitively summarize the important findings as well as provide a more detailed assessment on how they can help Roeland Park address climate change.

Dynamhex has the platform available, and it will be assumed that this scope of services would be completed within 4 months of an executed contract, with work to begin March 15, 2020. This schedule is driven by typical timelines required for data collection; if the team could secure all source data quickly (latest GIS shapefiles and attribute data), this schedule could be expedited. Dynamhex will review user engagement data in the middle of 2020 (June/July).

Thank you again for the opportunity to submit this proposal to you. We look forward to continuing our work supporting the sustainability efforts of the city of Roeland Park, Kansas.

NOTE: A discount will be applied to above scope of work from the Natural Resources Defense Council (NRDC) and can be applied to the City of Roeland Park.



Project Schedule

Task	Completion Date	Staff Time Estimate
Project Kick-off meeting: Share existing data available to City already available as initial benchmark. - Task 1	March 15, 2020	2 hrs.
Municipal greenhouse gas inventory review - Task 1	April 30, 2020	3 hrs.
<u>Draft</u> greenhouse gas report, reduction strategy and roadmap - Task 2	May 15, 2020	4 hrs.
<u>Final</u> greenhouse gas report with platform available community-wide. Dashboard - Reports - Dynamic engagement - Task 3	June – July, 2020	3 hrs.
Ongoing review and annual updates (planned)	Ongoing	TBD

Project Budget

Reimbursement for expenses will be made with concurrence by both parties about percentage completion of each activity item.

Task	Budget
Task 1: Greenhouse Gas Inventory Platform data review	\$7,000
Task 2: Emissions reduction roadmap review	\$2,500
Task 3: Dynamic platform for engagement and monitoring	\$2,500
Total project budget for above tasks	\$12,000
*MKCCAC Discount from NRDC - Regional leadership (50%)	(\$6,000)
Total	\$6,000

*We will honor this annual price for 2 additional years (2021 and 2022).



City of Roeland Park, KS

56,214 mt CO₂e

Commercial buildings

2019

Petroleum (fuel oil)	US gal	1,232
Natural gas	M MCF	32,451
Electricity	MWh	18,934

25%

Industrial facilities

2019

Petroleum (fuel oil)	US gal	2,308
Natural gas	M MCF	15,182
Electricity	MWh	1,260

3%

Residential buildings

2019

Petroleum (fuel oil)	US gal	1,712
Natural gas	M MCF	198,342
Electricity	MWh	30,559

54%

Transportation

2019

Aviation	US gal (jet fuel, aviation gasoline)	442,133
Railway	US gal (diesel fuel and electricity)	2,314
Waterborne	US gal (motor gasoline and diesel)	136
On-road	US gal (motor gasoline and diesel)	992800

19%

Preliminary data based on Dynamhex proprietary model on city-wide greenhouse gas emissions (as of 11/2018). For methodology, see [here](#)

Renewable sources of energy, such as onsite solar or biofuels are not shown in above estimates due to negligible emissions factors.

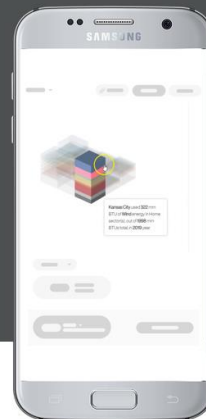
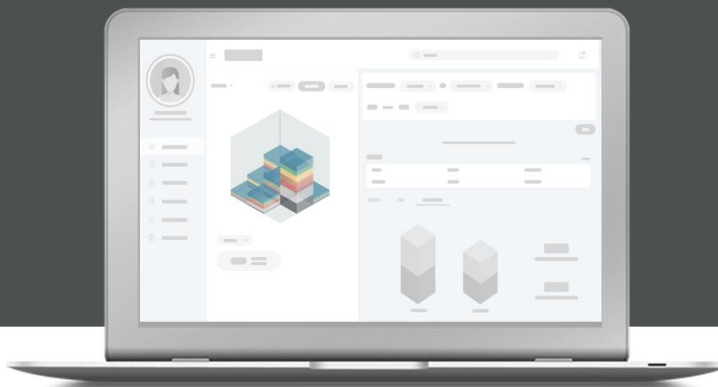
SPNO (SPP North) aggregates used for regional power and heat footprinting

Transportation intensity is shown in aggregates for on-road vehicles

Non-energy based emissions (steam, waste, etc.) not shown

Dynamhex

One-stop shop to dynamically and collaboratively track localized climate action plans



Dynamic Inventory

Goal setting: Integrate, aggregate and validate internal-external climate and energy data



Plan impactful actions

Goal achievement: Visual, data-centric way of tackling climate change mitigation initiatives



Measure progress

Goal tracking: Optimize and map actions with performance transparency and accountability across assumptions