Urban Data Workshop
June 26-28, 2019
University of Minnesota │ Minneapolis, Minnesota, USA

Objectives:

Assemble a core group of researchers and datasets that will contribute to developing a global dataset on urban area energy use in ways that add up and align with national totals. We call this method a Bot-Top approach because it combines as much bottom-up available data with top-down estimates. The method builds upon prior work that tested the methodology in China[1] and is presently being tested in India and the USA. We want to expand from these three countries to include additional countries in Asia [e.g., Japan, Thailand, etc.], EU, Australia, and Africa [e.g., Kenya, South Africa, etc.].

Draft Agenda:

Wednesday, June 26th

Joint Urban Session with the Global Carbon Project Scientific Steering Committee
8:30 am to 12:15pm │ Carlson School of Public Affairs – Private Dining Room

- Agenda for Joint Session to be determined

Lunch
12:15 pm - 1:15 pm │ │ Carlson School of Public Affairs – Private Dining Room

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[1] Ramaswami, A., Tong, K., Fang, A., Lal, R., Nagpure, A., Li, Y., Yu, Y., Jiang, D., Shen, H., Russell, A.G., Shi, L., Chertow, M., Wang, Y., Wang, S., 2017. Urban Cross-Sector Actions for Carbon Mitigation with Local Health Co-Benefits in China. Nature Clim. Change 7(10), 736-742.
Tong, K., Fang, A., Li, Y., Shi, L., Wang, Y., Wang, S., Ramaswami, A., 2018. The collective contribution of Chinese cities to territorial and electricity-related CO2 emissions. Journal of Cleaner Production 189, 910-921.

Afternoon working session: **Reviewing the methodology for aligning national scale data with bottom-up aggregated/scaled up data in US, China and India**

1:15 pm – 4:00 pm│ │ Carlson School of Public Affairs – Private Dining Room

- Review national data disaggregated by sectors
- Review bottom-up data and scale up to national total
- Checking for high-level alignment, quantify differences

    **Remaining sessions over the next two days are deep dive working sessions.

Thursday, June 27th

Morning working session: **Bottom-up approach for household energy use**
8:30 am to 10:30 pm │ Campus Club – Dale Shephard Room

- Spatially populate household energy use data across all urban areas using bottom-up approach
- Conduct error analysis if possible
    - India and US examples will be provided

Break
10:30 am to 10:45 pm │ Campus Club – Dale Shephard Room

Mid-morning working session: **Bottom-up approach for industrial energy use**
10:45 am to 12:45 pm │ Campus Club – Dale Shephard Room

- Spatially populate pillar industries
- Spatially populate other industrial use
- Conduct error analysis if possible
    - India and US examples will be provided

Lunch
12:45 pm – 1:45 pm │ Campus Club – Dale Shephard Room

Afternoon working session: **Bottom-up approach for commercial energy use**
1:45 pm – 4:00 pm | Campus Club – Dale Shephard Room

- Spatially populate commercial energy use
- Conduct error analysis if possible
    - India and US examples will be provided

Group Dinner
6:00 pm – 8:00 pm | Location to be determined

Friday, June 28th

Morning working session: **Transportation**
8:30 am to 10:30 pm | Campus Club – Dale Shephard Room

- Spatially populate energy use for passenger and commercial travel
    - New approaches ("Big Micro Data") from Yoshi
- Conduct error analysis if possible
    - India and US examples will be provided
    - Japan and Chinese city big data approaches to travel demand will be discussed

Break
10:30 am to 10:45 pm | Campus Club – Dale Shephard Room

Mid-morning working session: **Stretch Goal: Land use change emissions estimate**
10:45 am to 12:45 pm | Campus Club – Dale Shephard Room

Lunch
12:45 pm – 1:45 pm | Campus Club – Dale Shephard Room

Afternoon working session: **Stretch Goal: Built infrastructure and food systems**
1:45 pm – 4:00 pm | Campus Club – Dale Shephard Room

Closing and Next Steps
4:00 pm – 5:00 pm | Campus Club – Dale Shephard Room