

Comments on Draft Local Government Operations Protocol

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Friends:

Very useful *Protocol*. Great work. A couple of comments:

Re: **Employee Business Travel** (PDF page 107). Air travel is given short shrift relative to its importance for at least some Govts (although often more important for community-wide inventories). Even in cases where air travel may be de minimis, a bit more direction in the *Protocol* is warranted. A few cities and towns even own or operate airport facilities.

While numerous air travel calculators populate the web, I will mention a new one (since I did the research to support it on behalf of my City of Aspen and State of Colorado Govt):
www.aspenzgreen.com/offsets_calculator_air.cfm

The commercial air travel portion of the calculator does offer voluntary inclusion of radiative forcing factor (at 0.8893 of CO₂ from jet fuel combustion), emissions by flight distance segments, and a background great circle distance calculator.

But the real reason I mention the site — considering the plethora of commercial air travel calculators — is its calculator for 144 makes and models of *private and business jets and turboprop aircraft*, including pertinent aircraft emission averages by size (if make and model is unknown). While few cities own aircraft, they may, on occasion, be leased.

Re: **Mobile Refrigeration** (PDF pages 70 fwd). If I am reading the *Protocol* correctly, the default emission factors (in Table 7.2) are meant for de minimis calculations and should not be used for actual emissions estimation in cases where service records are not available (which I suspect is often the case). All such equipment leak at differing rates, and while a default factor that captures the “typical” range of leakage may be difficult to derive, I think additional guidance is warranted. I wish I could be of help, since I am right in the middle of investigating the topic for a client; alas, I do not yet have a good answer, and I was hoping the *Protocol* would guide me. In any case, I suspect the mass balance methodology — while clearly preferable — is often not available for lack of adequate records. It should be made clear that Table 7.2’s EFs should not be used in estimating actual emissions from refrigerant leakage.

I regret that I have not reviewed the bulk of the *Protocol*, or I would provide additional comments.

Respectfully,

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