

## Annex 2

### Questions for public inputs in relation to SSC-II.M “Demand-side energy efficiency activities for installation of low-flow showerhead hot water savings devices”

1. The SSC-WG has prepared a top-down draft methodology for low-flow showerhead hot water saving devices. This methodology is for determining emission reductions associated with reduced water heating requirements based on installation of low-flow showerheads in residences. Although this methodology in its current structure is limited to low-flow showerheads, but could be adopted to other water saving devices if adequate, reliable and conservative data and methods for determining usage patterns for applications are proposed.

2. The methodology presents two options for calculating certified emission reductions: use of a default energy savings value for water heating energy savings (per showerhead) and a monitoring approach. The monitoring approach calls for, in a sample of installations during the year of project implementation: (a) One-time measurements of project and baseline showerhead flow rates; and (b) Shower water consumption measurements for at least two, thirty-day periods. This monitoring approach is defined, versus the use of just one time flow rate measurements and self-reported shower usage information because research indicates that self-reported shower usage data are unreliable.

3. The SSC WG agreed to request the Board to launch a call for public inputs on the draft methodology and whether it represents a viable and conservative CDM small scale methodology and if the project proponents can use it for projects and PoAs. To this objective, the SSC WG is looking for feedback on:

- (a) Is the default value of 0.2 MWh of energy savings per low-flow showerhead a conservative and reasonable value? Will this value provide sufficient incentive for low-flow showerhead projects under the CDM given the cost of showerheads, the cost of direct installation, and other program costs as well as the availability of other funding sources to cover such costs? If not, what value would be recommended and what is the basis for this recommendation?
- (b) Should the methodology require that there be a maximum flow rate allowable for a low-flow showerhead, for example nine litres a minute? Should the methodology require that there be a minimum difference between the baseline and project showerheads flow rates, for example one litre per minute? Should the methodology specify a minimum flow rate for the baseline showerheads? If so, what values would be recommended and what is the basis for this recommendation?
- (c) Is the requirement that low-flow showerheads must contain integral, non-removable flow restrictions and come with a one-year warranty reasonable, and if not, what recommendations would be suggested to ensure that such devices are of relatively high quality, do not simply involve the insertion of plastic flow restrictors, and/or are not easily disabled?
- (d) Should a third-party testing and/or manufacturer certification of the low-flow showerhead's flow rates be a requirement of the methodology?
- (e) The minimum temperature allowable for cold water supply to the water heating system is 10°C and the maximum temperature allowable for showerhead water outlet is 40°C. Are

these conservative and reasonable values and if not, what value would be recommended and what is the basis for this recommendation?

- (f) Is the monitoring approach defined in the methodology reasonable and cost effective, and if not, what would be recommended and what is the basis for this recommendation?
- (g) Is it appropriate, as assumed for the monitoring approach, that the number and length of showers (minutes per shower) is the same before and after the installation of the low-flow showerhead? That is, can it be assumed that the decrease in flow rate does not change the showering effectiveness or patterns?
- (h) Would it be practical and perhaps more reliable to use a control group approach for determining energy savings from the installation of showerheads, and perhaps other water saving devices? A control group approach would involve comparing the annual energy use, in real time, between the participants in the CDM program and a group of non-participants with characteristics same as the participants (other than use of water saving devices);
- (i) Are there any special requirements that should be imposed for PoAs?