

# Urban Forest

## Comparison of California ARB Compliance Offset Protocol to Climate Action Reserve Voluntary Offset Project Protocol Version 1.1



The protocol adopted by the California Air Resources Board (ARB) for the creation of compliance offsets from urban forest projects contains several changes from the Climate Action Reserve (Reserve) Urban Forest Project Protocol Version 1.1. This document is meant to highlight some of the important changes that appear in the compliance protocol.

### Eligibility

- ⌘ ARB will accept projects that began as early as January 1, 2007, whereas the Reserve will only accept new projects.
- ⌘ Under the ARB compliance protocol, the crediting period has been shortened from 100 years to 25 years, but it will be renewable.
- ⌘ Under the ARB compliance protocol, utility tree plantings to replace removals from line clearance operations are now eligible for quantification, whereas these activities are not eligible under the Reserve protocol.

### Quantification

- ⌘ Under the ARB compliance protocol, the quantification of the carbon stocks held in the trees has been limited to the use of approved allometric equations, based on an annual measurement of all project trees or a representative sample, whereas the Reserve protocol provides for other options. Also, remote sampling of project trees is not allowed under the ARB compliance protocol.
- ⌘ Under the ARB compliance protocol, sampling error has been redefined as the following:  
$$\text{Sampling Error (90\% confidence interval)} = \left[ \frac{(1 \text{ Standard Error}) \times 1.645}{\text{Sample mean}} \right] \times 100$$
- ⌘ Minor changes were made to the ARB compliance protocol regarding the quantification of emissions from fossil fuel use, including different emission factors, allowance for actual fleet data to supplant default factors, and increased specificity regarding maintenance equipment.
- ⌘ Under the ARB compliance protocol, the carbon content of dead trees is now required to be quantified and recorded prior to removal.
- ⌘ Compared to the Reserve protocol, a greater level of detail is required under the ARB compliance protocol in the documentation of inputs to the project quantification; a greater number of parameters must be tracked and reported.

### Project Reporting and Verification

- ⌘ Compliance offset reports must be reviewed by a Professional Urban Forester, or another eligible individual. This requirement is not included in the Reserve protocol.
- ⌘ Under the ARB compliance protocol, the verification team must include at least one Professional Urban Forester and one ARB-accredited Forest or Urban Forest Offset Project Specialist.

