
Greenhouse Gas Industrial Reporting and Control Act Bulletin

Determining the Remaining Life of an Asset

Greenhouse Gas Industrial Reporting and Control Act Protocol

Overview

This bulletin provides information about how to determine the remaining life of an asset for a greenhouse gas offset project developed according to a protocol established under the *Greenhouse Gas Industrial Reporting and Control Act*. The remaining life is the reasonable and most likely amount of time an asset will be operational and provide its intended function.

An asset means equipment including all types of equipment related to industrial, commercial and residential facilities, power plant equipment (e.g., boilers, turbines, electric generators, pumps, motors, engines) and a single component, or an assembly of several components but does not include consumer goods (except industrial appliances, such as chillers, refrigerators, etc.).

Methods of Determination

There are two methods used to determine the remaining life of an asset:

Method 1: Internal Evaluation

The remaining life of an asset is determined by subtracting the operational life from the technical life of an asset.

$$\text{Remaining Life of an Asset} = [\text{Technical Life}] - [\text{Operational Life}]$$

Operational life is determined by calculating the total time that the asset has been operating since the completion of the initial testing period as defined in the applicable Protocol. If the operational life is greater than the technical life, the remaining life of the asset is determined to be zero.

Technical life is the total life that the asset is designed to function. The technical life provided by the manufacturer may be applied if all the following criteria are met:

- i. Manufacturer's information for the technical life of the asset is available;
- ii. The Project Proponent can demonstrate that the asset has been operated and maintained according to the recommendations of the manufacturer;
- iii. There are no asset replacement schedules specific to the operation that require early replacement of the asset before the expiry of the technical life; and,
- iv. The asset has no defects and has not been subject to industrial accidents.

In cases where the asset was altered prior to the implementation of the Project or improved through energy efficiency measures, the technical life provided by the manufacturer may no longer be applicable.

Method 2: Independent Expert Evaluation

An independent expert may determine the remaining life of an asset. The independent expert must have relevant experience in evaluating the remaining life for the asset type and be registered as a professional engineer or have a limited license to practice professional engineering as defined by the B.C. *Engineers and Geoscientists Act*.

Information to be evaluated includes:

- (a) The operational life of the asset;
- (b) Current operation and maintenance practices;
- (c) Documented specific sectoral / industry practices for replacements; and
- (d) Results of tests conducted on the asset by the expert (e.g., magnetic particle examinations, ultrasonic testing, or metallurgical analysis).

The expert must document his/her methods and conclusions and provide an evaluation stating the estimated remaining life of the asset. All relevant documentation must be available to the validator.