

Setting Organizational Boundaries

Business operations vary in their legal and organizational structures; they include wholly owned operations, incorporated and non-incorporated joint ventures, subsidiaries, and others. For the purposes of financial accounting, they are treated according to established rules that depend on the structure of the organization and the relationships among the parties involved. In setting organizational boundaries, a company selects an approach for consolidating GHG emissions and then consistently applies the selected approach to define those businesses and operations that constitute the company for the purpose of accounting and reporting GHG emissions.

For corporate reporting, two distinct approaches can be used to consolidate GHG emissions: the equity share and the control approaches. Partners shall account for and report their consolidated GHG data according to either approach as presented below. *Under the Climate Leaders program, companies may additionally choose to report using both approaches, and additionally may include facilities that are neither owned nor controlled.*

If the reporting company wholly owns all its operations, its organizational boundary will be the same regardless of approach used. For companies with joint operations, the organizational boundary and the resulting emissions may differ depending on the approach used. However,

in both wholly owned and joint operations, the choice of approach may change how emissions are categorized when operational boundaries are set (Chapter 4).

Equity Share Approach

Under the equity share approach, a *Partner* accounts for GHG emissions from operations according to its share of equity in the operation. The equity share reflects economic interest, which is the extent of rights a company has to the risks and rewards flowing from an operation. Typically, the share of economic risks and rewards in an operation is aligned with the company's percentage ownership of that operation, and equity share will normally be the same as the ownership percentage. Where this is not the case, the economic substance of the relationship the company has with the operation will always override the legal ownership form to ensure that equity share reflects the percentage of economic interest. The principle of economic substance taking precedent over legal form is consistent with international financial reporting standards. The staff preparing the inventory may therefore need to consult with the *Partner's* accounting or legal staff to ensure that the appropriate equity share percentage is applied for each joint operation (refer to Table 3-1 for definitions of financial accounting categories).

Table 3-1: Financial Accounting Categories

Accounting Category	Definition*	Accounting for GHG Emissions		
		Equity Share Approach	Control Approach	
			Financial Control	Operational Control
Group Companies/ Subsidiaries	The parent company has the ability to direct the financial and operating policies of the company with a view of gaining economic benefits from its activities. One hundred percent of the subsidiary's income and expenses, and assets and liabilities are taken into the parent company's profit and loss account and balance sheet, respectively. Typically, a subsidiary is a company whose voting stock is more than 50 percent owned by another company (the parent company).	Equity share of GHG emissions	100 percent of GHG emissions	100 percent of GHG emissions (if operational control) 0 percent of GHG emissions (if no operational control)
Associated/ Affiliated Companies	Typically, the parent company owns less than 50 percent of the affiliated company's stock (or otherwise does not have financial control), but still has influence over its operations and financial policies. This includes incorporated and non-incorporated joint ventures and partnerships over which the parent company has significant influence, but not financial control.	Equity share of GHG emissions	0 percent of GHG emissions	100 percent of GHG emissions (if operational control) 0 percent of GHG emissions (if no operational control)
Proportionally Consolidated Joint Ventures (where partners have joint financial control)	A joint venture, partnership, or operation where each partner accounts for their proportion of the joint venture's income, expenses, assets, and liabilities. Each partner has an equal financial share of the operation.	Equity share of GHG emissions	Equity share of GHG emissions (e.g., 50% if two partners, 33.33% if three partners, etc.)	100 percent of GHG emissions (if operational control) 0 percent of GHG emissions (if no operational control)
Fixed Asset Investments	The parent company has neither significant influence nor financial control. Typically financial accounting applies the cost/dividend method to these types of investments. This implies that only dividends received are recognized as income and the investment is carried at cost.	0 percent of GHG emissions	0 percent of GHG emissions	0 percent of GHG emissions
Franchises	A franchise is a separate legal entity, usually not under the financial or operational control of its franchiser, which gives rights to sell a product or service. Should the terms of a franchise grant financial or operational control to the franchiser, then emissions accounting should be consistent with the rules provided above.	Equity share of GHG emissions (if the franchiser has equity rights)	100 percent of GHG emissions (if the franchiser has financial control) 0 percent of GHG emissions (if the franchiser does not have financial control)	100 percent of GHG emissions (if operational control) 0 percent of GHG emissions (if no operational control)

*<http://www.ventureline.com/glossary.asp> and the GHG Protocol

Control Approach

Under the control approach, a *Partner* accounts for 100 percent of the GHG emissions from operations over which it has control. It does not account for GHG emissions from operations in which it owns an interest but has no control. Control can be defined in either financial or operational terms. When using the control approach to consolidate GHG emissions, companies shall choose between either the operational or financial control criteria.

In most cases, whether an operation is controlled by the company or not does not vary based on whether the financial control or operational control criterion is used. A notable exception is the oil and gas industry, which often has complex ownership/operatorship structures.

Financial Control

A *Partner* has financial control over the operation if the former has the ability to direct the financial and operating policies of the latter with a view to gaining economic benefits from its activities. For example, financial control usually exists if the company has the right to the majority of benefits of the operation, without regard to the manner by which these rights are conveyed. Similarly, a company is considered to financially control an operation if it retains the majority risks and rewards of ownership of the operation's assets.

Under this criterion, the economic substance of the relationship between the company and the operation takes precedence over the legal ownership status, so that the company may have financial control over the operation even if it has less than a 50 percent interest in that operation. In assessing the economic substance

of the relationship, the impact of potential voting rights, including both those held by the company and those held by other parties, is also taken into account. This criterion is consistent with international financial accounting standards; therefore, a company has financial control over an operation for GHG accounting purposes if the operation is considered as a group company for the purpose of financial consolidation, i.e., if the operation is fully consolidated in financial accounts. If this criterion is chosen to determine control, emissions from joint ventures where partners have joint financial control are accounted for based on the equity share approach (refer to Table 3-1 for definitions of financial accounting categories).

Operational Control

A *Partner* has operational control over an operation if the former or one of its subsidiaries (refer to Table 3-1 for definitions of financial accounting categories) has the full authority to introduce and implement its operating policies at the operation.

This criterion is consistent with the current accounting and reporting practice of many companies that report on emissions from facilities, which they operate (i.e., for which they hold the operating license). It is expected that, except in very rare circumstances, if the company or one of its subsidiaries is the operator of a facility, it will have the full authority to introduce and implement its operating policies and thus has operational control. Under the operational control approach, a company accounts for 100 percent of emissions from operations over which it or one of its subsidiaries has operational control.

It should be emphasized that having operational control does not mean that a company necessarily has authority to make all decisions concerning an operation. For example, big capital investments will likely require the approval of all the partners that have joint financial control. Operational control does mean that a company has the authority to introduce and implement its operating policies.

Sometimes a company can have joint financial control over an operation, but not operational control. In such cases, the company would need to look at the contractual arrangements to determine whether any one of the partners has the authority to introduce and implement its operating policies at the operation and thus has the responsibility to report emissions under operational control. If the operation itself will introduce and implement its own operating policies, the partners with joint financial control over the operation will not report any emissions under operational control.

Table 3-2 on page 14 illustrates the selection of a consolidation approach at the corporate level and the identification of those joint operations that should be in the organizational boundary depending on the choice of the consolidation approach.

Leased Assets, Outsourcing, and Franchises

The selected consolidation approach (equity share or one of the control approaches) is also applied to account for and characterize direct and indirect GHG emissions from contractual arrangements such as leased assets, outsourcing, and franchises. Specific guidance on leased assets is provided below:

Using Equity Approach or Financial Control

A lessee only accounts for emissions from leased assets that are treated as wholly owned assets in financial accounting and are recorded as such on the balance sheet (i.e., finance or capital leases). *A finance/capital lease is one that transfers substantially all the risks and rewards of ownership to the lessee. All leased assets that do not meet the criteria for finance/capital leases are considered operating leases.*

Guidance on which leased assets are considered operating leases and which are considered finance/capital leases should be obtained from the company accountant.

Using Operational Control

A lessee only accounts for emissions from leased assets that it operates (i.e., if the operational control criterion applies). *This applies to both finance/capital leases and operating leases.*

Climate Leaders assumes operational control of a lease applies if the lessee has the ability to track energy use and/or emissions from the lease.

The ability of a Partner to track energy use and/or emissions from its leases includes the following methods:

- *The Partner pays the utility bill for leased space or the fuel bill for leased vehicles and has data on the actual amount of fuel and electricity used by the lease.*
- *The Partner leases part of a larger building and does not pay its own utility bill. However, it can get the fuel and electricity use for the entire building from the landlord, and there is an accurate method to allocate total energy use/emissions to the Partner's leased space (e.g., separate electricity meter for the Partner's space).*

- *The Partner leases many homogeneous sites (e.g., commercial and retail space) that represent a significant portion of their inventory and for which the individual sites have data on the amount of fuel and electricity used. However, it would be difficult to get the data from all the decentralized leased sites. In this case, the Partner could do a statistical sampling of sites to get emissions and extrapolate those results to the remainder of its leased sites.*

For the last two methods, the Partner should be careful when tracking changes in emissions for these leases over time. In the case of allocating energy use from the entire building, the allocation method should allow for tracking changes made to the Partners leased space only (e.g., not just allocating based on a percentage of total building floor space). In the case of like sites, the Partner should ensure that emissions reductions or increases are actually happening in all sites and not just the ones measured for the statistical sample, or that the statistical sample and analysis is accurate enough to account for differences at different leased sites.

A Partner can also choose to include emissions from leases that fall outside of its organizational boundaries. These emissions would be reported under the *optional emissions source category* on the *Climate Leaders Annual GHG Inventory Summary and Goal Tracking Form*.

Consolidation at Multiple Levels

The consolidation of GHG emissions data will only result in consistent data if all levels of the organization follow the same consolidation policy. In the first step, the management of the parent company has to decide on a

consolidation approach (i.e., either the equity share or the financial or operational control approach). Once a corporate consolidation policy has been selected, it is applied to all levels of the organization.

State-Ownership

The rules provided in this chapter can also be applied to account for GHG emissions from industry joint operations that involve state ownership or a mix of private/state ownership.

Double Counting

When two or more companies hold interests in the same joint operation and use different consolidation approaches (e.g., Company A follows the equity share approach while Company B uses the financial control approach), emissions from that joint operation could be double counted. This may not matter for voluntary corporate public reporting, including the *Climate Leaders program*, as long as there is adequate disclosure from the company on its consolidation approach (*via the Inventory Management Plan*).

Contracts That Cover GHG Emissions

To clarify ownership (rights) and responsibility (obligations) issues, companies involved in joint operations may draw up contracts that specify how the ownership of emissions or the responsibility for managing emissions and associated risk is distributed between the parties. Where such arrangements exist, companies may optionally provide a description of the contractual arrangement and include information on allocation of CO₂ related risks and obligations (see Chapter 9).

Using the Equity Share or Control Approach

Climate Leaders makes no recommendation as to whether reporting should be based on the equity share or control approach, however whichever method is selected, it should be applied consistently throughout the inventory. The reporting method a Partner chooses should be clearly stated in the company's Inventory Management Plan.

Companies should decide on the approach best suited to their business activities and GHG accounting and reporting requirements.

Examples of how these may drive the choice of approach include the following:

- **Reflection of commercial reality.** It can be argued that a company that derives an economic profit from a certain activity should take ownership for any GHG emissions generated by the activity. This is achieved by using the equity share approach, because this approach assigns ownership for GHG emissions on the basis of economic interest in a business activity. The control approaches do not always reflect the full GHG emissions portfolio of a company's business activities, but have the advantage that a company takes full ownership of all GHG emissions that it can directly influence and reduce.
- **Liability and risk management.** While reporting and compliance with regulations should most likely continue to be based directly on operational control, the ultimate financial liability will often rest with the group company that holds an equity share in the operation or has financial control over it. Hence, for assessing risk, GHG reporting on the basis of equity share and financial control approaches provides a more complete picture. The equity share approach is likely to result in the most comprehensive coverage of liability and risks. In the future, *Partners* might incur liabilities for GHG emissions produced by joint operations in which they have an interest, but over which they do not have financial control. For example, a company that is an equity shareholder in an operation but has no financial control over it might face demands by the companies with a controlling share to cover its requisite share of GHG compliance costs.
- **Alignment with financial accounting.** Future financial accounting standards may treat GHG emissions as liabilities and emissions allowances/credits as assets. To assess the assets and liabilities a company creates by its joint operations, the same consolidation rules that are used in financial accounting should be applied in GHG accounting. The equity share and financial control approaches result in closer alignment between GHG accounting and financial accounting.
- **Management information and performance tracking.** For the purpose of performance tracking, the control approaches seem to be more appropriate because managers can only be held accountable for activities under their control.
- **Cost of administration and data access.** The equity share approach can result in higher administrative costs than the control approach, since it can be difficult and time consuming to collect GHG emissions data

from joint operations not under the control of the reporting company. *Partners* are likely to have better access to operational data (and, therefore, greater ability to ensure that it meets minimum quality standards) when reporting on the basis of control.

- **Completeness of Reporting.** Companies might find it difficult to demonstrate completeness of reporting when the operational control criterion is adopted, because there are unlikely to be any matching records or lists of financial assets to verify the operations that are included in the organizational boundary.

The following example, illustrated in Figure 3-1 and Table 3-2, illustrates how to account for GHG emissions from the various wholly owned and joint operations under both the equity share and control approaches.

Example

Holland Industries is a chemicals group comprising a number of companies/joint ventures active in the production and marketing of chemicals.

In setting its organizational boundary, Holland Industries first decides whether to use the equity or control approach for consolidating GHG data at the corporate level. It then determines which operations at the corporate level meet its selected consolidation approach. Based on the selected consolidation approach, the consolidation process is repeated for each lower operational level. In this process, GHG emissions are first apportioned at the lower operational level (subsidiaries, associate, joint ventures, etc.) before they are consolidated at the corporate level. Figure 3-1 presents the organizational boundary of Holland Industries based on the equity share and control approaches.

Note that in this example, Holland America (not Holland Industries) holds a 50 percent interest in BGB and a 75 percent interest in IRW. If the activities of Holland Industries itself produce GHG emissions (e.g., emissions associated with electricity use at the head office), then these emissions should also be included in the consolidation at 100 percent.

Figure 3-1: Defining the Organizational Boundary of Holland Industries

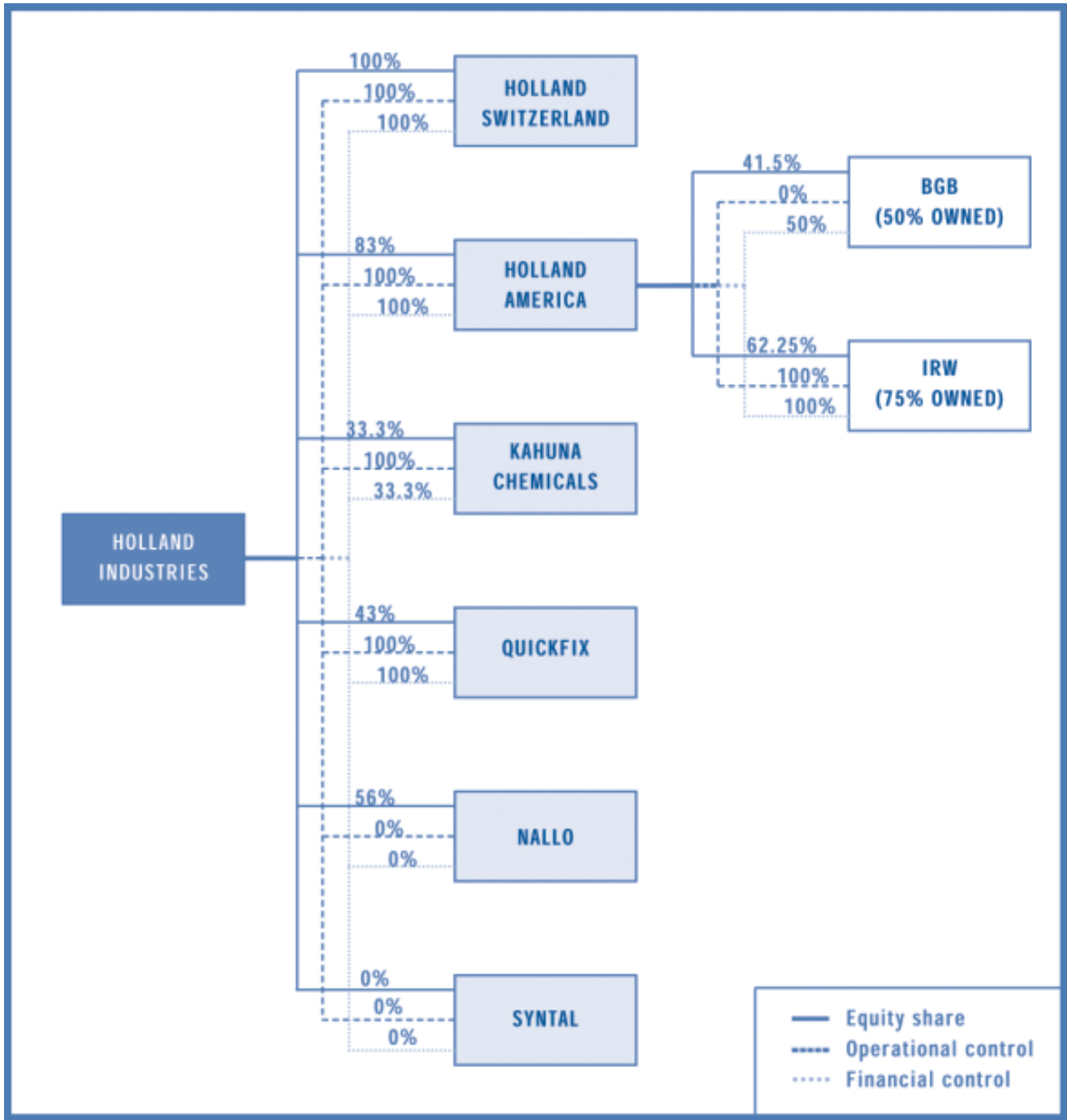


Table 3-2: Holland Industries Organizational Structure and GHG Emissions Accounting

Wholly Owned and Joint Operations of Holland	Legal Structure and Partners	Economic Interest Held by Holland Industries	Control of Operating Policies	Treatment in Holland Industries' Financial Accounts	Emissions Accounted for by Holland Industries	
					Equity Share Approach	Control Approach
Holland Switzerland	Incorporated company	100%	Holland Industries	Wholly owned subsidiary	100%	100% for operational control 100% for financial control
Holland America	Incorporated company	83%	Holland Industries	Subsidiary	83%	100% for operational control 100% for financial control
BGB	Joint venture, partners have joint financial control; the other partner is Rearden	50% owned by Holland America	Rearden	Via Holland America	41.5% (83% x 50%)	0% for operational control 50% for financial control (50% x 100%)
IRW	Subsidiary of Holland Industries	75% owned by Holland America	Holland America (subsidiary of Holland Industries)	Via Holland America	62.25% (83% x 75%)	100% for operational control 100% for financial control
Kahuna Chemicals	Non-incorporated joint venture; partners have joint financial control; two other partners: ICT and BCSF	33.3%	Holland Industries	Proportionally consolidated joint venture	33.3%	100% for operational control 33% for financial control
QuickFix	Incorporated joint venture; the other partner is Majox	43%	Holland Industries	Subsidiary (Holland Industries has financial control because it treats QuickFix as a subsidiary in its financial accounts)	43%	100% for operational control 100% for financial control
Nallo	Incorporated joint venture; the other partner is Nagua Co.	56%	Nallo	Associated company (Holland Industries does not have financial control because it treats Nallo as an associated company in its financial accounts)	56%	0% for operational control 0% for financial control
Syntal	Incorporated company, subsidiary of Erewhon Co.	1%	Erewhon Co.	Fixed asset investment	0%	0% for operational control 0% for financial control