

## Level 2 Step 1.6 Example Scope and Boundaries

### Industrial Example

The Reliable Automobile Company assembly plant has four buildings associated with the plant. The main assembly plant is joined by a transportation corridor to a parts staging warehouse that is operated by a contract supplier. The electricity and natural gas for the parts staging warehouse are metered separately by the local utilities. The electricity for the lights and equipment in the transportation corridor is measured by the electricity utility meter for the main assembly plant.

The remaining two buildings are not attached to the main assembly plant. One is the power house which contains the boilers, air compressors and chillers for the assembly plant. The electricity and natural gas for the power house are supplied from the meters that measure these utilities for the main assembly plant. The other stand-alone building is the finished vehicle loading facility, which is operated by a logistics contractor. The electricity for the vehicle loading facility is also metered separately by the local utility.

There is no natural gas consumption in the vehicle loading facility.

The company that operates the assembly plant has no operational control over the two contractors that operate on their site.

### Example 1:

**Acceptable scope** – Entire site

**Acceptable boundaries** – The site boundary lines

The management and employees of the two contractors would have to be included in the energy management system implementation. The electricity and natural gas would be totaled with the assembly plant energy consumption to know the total energy consumption for the site.

### **Example statement:**

The scope and boundaries of the Reliable Automobile Company energy management system includes the assembly facilities, operations and processes located at 4 Wheel Drive, Detroit, Michigan and includes the contractor operations, facilities and processes in the parts staging warehouse and finished vehicle delivery facility.

### Example 2:

**Acceptable scope** – Assembly operations and processes of the automotive manufacturer

**Acceptable boundary**– Assembly plant and power house

**Unacceptable boundary** - Assembly plant

Without any way to measure the energy passing from the power house and the assembly building in the form of steam, compressed air and chilled water, the automotive manufacturer would have no way to effectively measure energy consumption.

**Unacceptable boundary** –Power house and assembly plant without the transportation corridor.

There is no effective way to measure electricity consumption for the assembly plant without the transportation corridor.

**Unacceptable boundary** – Assembly related processes and operations that use natural gas only  
The scope and boundaries cannot be limited to one energy source within the organization.

**Example statement:**

The scope and boundaries of the Reliable Automobile Company energy management system includes the assembly facilities, operations and processes located at 4 Wheel Drive, Detroit, Michigan and excludes the contractor operations, facilities and processes in the parts staging warehouse and finished vehicle delivery facility.

**Commercial Building Example**

The Dependable Business Center is a downtown, multi-tenant, 10 story, professional office space building. The facility is the only occupied building on a two acre lot which also includes an adjacent parking deck which is managed and operated by a company that specializes in parking lot management and operation. The lights and exhaust fans in the parking deck are supplied by the electricity from the office building, but they are on a separate circuit which is metered by the building control system. The electricity for the 10 story building, including the parking deck, is measured by a single utility meter.

**Acceptable scope** – Building activities, operations and processes

**Acceptable boundary**– Building and site, excluding the adjacent parking lot

**Example statement:**

The scope and boundaries of the energy management system includes the facilities, activities and operations of the Dependable Business Center and tenants, located at 123 Main Street, Washington, DC, and excludes the facilities, activities and operations of the parking deck located at the same address.