# CLIMATE AT TK ELEVATOR

### How TK Elevator applies sustainability to elevators

#### **Climate and Elevators**

CDP A List company in 2020. We set aggressive carbon targets addressing climate change and showcased climate leadership that resulted in a CDP A List score in 2020.



**Classically accounted as own emissions** 

### Scope 1 & 2: Target

Reduce 25% absolute scope 1 and 2 GHG emissions by 2030 from a 2019 base year. Reduce 50% of scope 1 and 2 GHG emissions by 2040. Net-zero carbon by 2050.



Direct emissions of own assets

Upstream Indirect emissions from upstream supply chain

Indirect emissions from electricity consumption



Downstream Indirect emissions from customer product use

#### Scope 3: Target

Reduce value chain Scope 3 product emissions per unit ordered. Formal target to release late-2021.



#### MOVE BEYOND

### ABOUT OUR FACTORY

TK Elevator's factory was built in Middleton, Tennessee 1969 and has added four major construction additions since the factory opening. TK Elevator factory has earned LEED<sup>®</sup> Existing Building for Operations and Maintenance Gold certification. That's nearly 700,000 square feet of LEED Gold.



### **Getting Gold**

Our factory scored 63 out of possible 110 points. This earned us Gold certification, the second highest LEED classification in 2015. In our certification we replaced nearly 1/2 of our roof coating for more reflectivity, created native open space, and lowered our energy demand.

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### Low Carbon Manufacturing

TK Elevator is one of a few companies participating in the Department of Energy's Better Buildings, Better Plants Low Carbon Pilot. We are partnering with the DOE to lower our carbon emissions in our manufacturing plant.



### **LEED & Well Professionals**

TK Elevator seeks to lead the way in knowledgeable professionals willing to help our customers. We have LEED Accredited Professionals, more than 200 LEED Green associates and WELL Accredited Professionals. We are dedicated to offering the best support for your LEED and WELL projects.

### ELEVATORS AND CARBON



We have long been studying and improving both our embodied and operational carbon through Environmental Product Declarations (EPD). TK Elevator was the first elevator company to publish an EPD in 2017 and has performed Life Cycle Assessments for more than a decade. We have a full product lineup with EPDs to help you compare the operational and embodied carbon of elevators.

### **Embodied Carbon**

Our full suite of EPDs reviews embodied carbon of elevators from raw material, shipping, manufacturing in our LEED Gold facility, transportation and installation.

### **Operational Carbon**

Use and maintenance phases are considered in our EPDs for all our products that complete the full cradle-to-gate scope of our life cycle assessments.

### MATERIAL TRANSPARENCY AT TK ELEVATOR

Material Transparency means gaining trust; the trust of our customers and their end users. When we openly and voluntarily share all materials we use to make our products, we make our consumers feel empowered and knowledgeable about their purchases. We earn their trust and forge stronger relationships.



### **EPD**<sup>®</sup> Environmental Product Declaration (EPDs)

TK Elevator has a full suite of EPDs for our products.



### Health Product Declaration (HPDs)

TK Elevator was the first to publish an HPD in 2015 and was a founding member of the Health Product Declaration Collaborative. We have HPDs for full products. Our HPDs disclose at the 1000 ppm level required by LEED<sup>®</sup>, a tough feat for an elevator with over 10,000 pieces and parts.



### Cradle to Cradle

TK Elevator is the only elevator company to offer a Cradle to Cradle Material Health Certificate for our products and the first to receive a Platinum label for our canola-based environmax® oil for our hydraulic elevators.

### Declare. Declare

TK Elevator is the only elevator company to offer Declare labels for your Living Building Challenge products.

## BUILDING TRUST



### **Environmental Product Declaration (EPDs)**

EPDs don't determine if a product is environmentally better than another. You make that decision for yourself. EPDs share the environmental impact of a product. Things like, how much waste is created to build a product, how much pollution is released and what's the life expectancy of the product. This way, consumers can look at similar products and make an informed decision about what's best for them.



### Health Product Declaration (HPDs)

Most people don't enjoy inhaling toxins, especially without their knowledge. HPDs show the ingredients of building materials and their potential health effects in a standard format. This makes decision-making for builders easier.



### **Cradle to Cradle**

Ever heard of "cradle to grave?" Something gets created then its life cycle comes to an end. Products like this usually end up in the garbage. Cradle to Cradle means that at the of a product's life cycle it gets upcycled or finds a renewed use, it's born again.



### **Declare Label**

The label streamlines information for the tough new Living Building Challenge standard and answers three questions:

- Where does the product come from?
- What's it made of?
- Where does it go at its end of life?

After a company has thoroughly answered those questions and has been awarded the label, it's entered into a free database. When someone – a designer, for example – looks up a product, the complex chemical analysis and raw material source location information of the product is presented in an easy-to-use nutrition label format.

# LEED<sup>®</sup> V4 AND V4.1

### **Credit Matrix**

Credit	Intent	How TK elevator can help
EA Optimize Energy Performance	Use whole building energy simulation to achieve increasing levels of energy performance.	TK Elevator's team can help you determine energy savings, including savings from regenerative drives, using an energy calculator based on ISO 25745 over a baseline that can be added to your project's energy model.
MR Building Product Disclosure and Optimization: Environmental Product Declarations (EPDs).	Encourage the use of products and materials with publicly available, critically reviewed life-cycle assessments conforming to ISO 140 44 that have at least cradle-to-gate scope.	TK Elevator North America has published four EPDs that follow the Product Category rules of the International EPD® System.
MR Building Product Disclosure and Optimization: Material Ingredients.	Encourage the use of products and materials for which life-cycle information is available and reward teams for selecting products from companies that have inventoried chemical ingredients.	TK Elevator has two Health Product Declarations, two Declare labels, and two Bronze Cradle to Cradle Material Health Certificates.
Pilot Credit: Integrative Analysis of Building Materials	Encourage the use of products and materials for which life-cycle information is available and that have environmentally, and socially preferable life-cycle implants.	TK Elevator has four elevator options that can count toward the required three products for this credit.
Innovation	Encourage projects to achieve exceptional or innovation performance.	TK Elevator has multiple comprehensive strategies with proven quantitative benefits outside of LEED's current credits.