# **Bar Charts**

Bar charts are used to categorize and compare datasets. Colors are used to represent different categories, while size is used to represent the category values.

## **Component**

[Design System Image]

[BLCIconButton Component - Interactive React component]

#### When to use

Bar charts work well for satisfying the following user needs, among others:

- Absorb dense / complex content, such as financial figures or data from sensors;
- Comparing different states of the same data, such as energy consumption across time;
- Identifying part-to-whole relationships, such as budget allocation;
- Observing trends over time;
- · Ranking items based on quantity.

Data is grouped into categories and assigned a bar. The bars can be displayed vertically or horizontally. The numeric value of each category determines the length of each bar.

## **Layout options**

Bar charts are commonly presented in the following layouts:

[VariantIllustration Component - Interactive React component]

## **Best practices**

Start with a baseline of zero

To facilitate analysis, the X-axis on bar charts should always start at zero. Having a different value as a baseline can distort the proportions between bars, which can cause the data to be perceived incorrectly.

[Design System Image]

Avoid over-styling bars

Do not choose aesthetic over readability. Anything that could mislead the user and their interpretation of the data should not be altered or added.

[Design System Image]

Display ordered bars to help deliver your message

Horizontal bar charts can be really useful for magnitude and ranking. If your objective is to help the user quickly identify ordinal relationships, consider ranking your Y-axis from highest (top) to lowest (bottom) numbers, while using the X-axis to determine magnitude.

#### [Design System Image]

#### **Additional resources**

For more in-depth information on how to design bar charts for Eaton, please refer to:

[BLCIconButton Component - Interactive React component]

[BLCIconButton Component - Interactive React component]

# **Related Components**

[VariantIllustration Component - Interactive React component]

[VariantIllustration Component - Interactive React component]