3. Materials and Buildings Group

The Materials and Buildings Group includes, but is not limited to, industries listed in Figure 11.

Materials and Buildings Group organizations are typically capital intensive, require high investments in plants, equipment, and buildings that are (relatively) fixed in terms of location, and dependent on sources of raw and refined materials. This may reduce the flexibility of organizations in this group to adapt to risks of climate change.

Many of this group’s activities result in financial exposures around high GHG emissions and high energy consumption. Furthermore, a number of industries in this group are dependent on water availability and/or vulnerable to the effects of acute or chronic physical risks from weather events.

Since the group is capital intensive and the plants and facilities have a long life span, accelerated R&DD (research, development, demonstration, and deployment) is critically important. Thus, disclosures relating to R&DD plans and progress are valuable to see the current and future situation and risks of organizations in the group.

Consequently, disclosures should focus on qualitative and quantitative assessments and potential impacts of the following:

- Stricter constraints on emissions and/or pricing carbon emissions and related impact on costs.
- The construction materials and real estate sectors should assess risks related to the increasing frequency and severity of acute weather events or increasing water scarcity that impact their operating environment.
- Opportunities for products (or services) that improve efficiency, reduce energy use, and support closed-loop product solutions.

Materials and Buildings Group organizations should consider providing additional industry-specific metrics. Examples of potential metrics include building energy intensity by area, building water intensity (by occupants or square area), percent of fresh water withdrawn in regions with high or extremely high baseline water stress, and area of buildings, plants, or properties located in designated flood hazard areas.

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