



## **ICCR Investor Packet for Campaign for a Clean Energy Economy: Science-Based Corporate GHG Reductions**

### **Background:**

Steep reductions in greenhouse gas emissions will be required to keep global average temperature rise below 2 degrees Celsius - a benchmark widely regarded as necessary to avert catastrophic impacts of climate change. Companies can contribute to this goal in at least two major ways: increase their energy efficiency and supply their remaining energy needs by using renewable energy. Electric Utilities can aggressively promote energy efficiency among their customers, and integrate more renewable energy onto the grid.

The International Energy Association (IEA) estimates that roughly 40% of the emissions reductions required by 2050 to meet the goal of staying below 2 degrees Celsius would potentially come from energy efficiency. (IEA, Energy Efficiency Market Report 2015 (p. 3). Renewable energy will need increasingly to replace fossil fuels in the supply of electricity, with the management of this variable energy source dependent on adequate storage capacity.

In 2017 and beyond, ICCR members will engage with companies that are high-GHG-emitters, and those companies that lack a science-based GHG reduction target or renewable energy goal, for which climate is a material issue. The objective is to encourage companies to adopt a science-based target and/or adopt a robust renewable energy sourcing goal.

### **What is Needed to Avoid Dangerous Climate Change?**

(Source: World Resources Institute; <http://www.wri.org/blog/2015/12/cop21-qa-what-ghg-emissions-neutrality-context-paris-agreement> )

To have a likely chance (>66% probability in 2100) of limiting warming to below 2°C:

- Carbon dioxide emissions have to drop to net zero between 2060 and 2075
- Total GHG emissions need to decline to net zero between 2080 and 2090

To have a likely chance (>50% probability in 2100) of limiting warming to below 1.5°C:

- Carbon dioxide emissions have to drop to net zero between 2045 and 2050
- Total GHG emissions need to decline to net zero between 2060 and 2080

Achieving the emissions reductions that will likely limit warming to 1.5°C will entail:

- A faster and profound de-carbonization of energy supply, through a full de-carbonization of the power sector before 2050
- Significantly lower emissions in industry, buildings and transport by 2050
- A crucial role in demand moderation by increasing energy efficiency (energy/GDP) at faster rates than historically observed

- Diverting investments towards low-carbon technologies in coming decades
- Higher mitigation costs

***In sum, staying within 1.5°C entails requirements that are very similar to the those needed for 2°C, but they need to be taken sooner (early action), achieve their targets faster (net zero by 2050) and at a larger scale (more reductions; more negative emissions; higher mitigation costs).***

## **Talking Points with Companies on the Importance of Science-Based Targets:**

### ***Business Case for setting a SBT:***

[\*\(From Science-Based Targets website\)\*](#)

Reducing GHG emissions protects our climate and our communities, and this is also good for business. Companies that set science-based targets build long-term business value and safeguard their future profitability in four important ways:

#### **1. Drive innovation**

The transition to a low-carbon economy will catalyze the development of new technologies and operational practices. The companies that set ambitious targets now will lead innovation and transformation tomorrow.

#### **2. Save money and increase competitiveness**

Setting ambitious targets now ensures a lean, efficient, and durable company in a future where resources become increasingly more expensive – particularly resources derived from fossil fuels. Rising prices of raw materials can mean the difference between profit and loss.

#### **3. Build credibility and reputation**

Companies taking a leadership position on climate bolster their credibility and reputation among stakeholders, including investors, customers, employees, policy makers and environmental groups. Approximately half of consumers worldwide believe climate change will have a negative effect on their own lives, and 65 per cent of consumers agree that human activity is responsible for climate change. Meanwhile, companies increasingly want to do business with suppliers that are taking climate change seriously so that they can reduce GHG exposure in their value chain.

#### **4. Influence & prepare for shifting public policy**

Taking ambitious action now helps companies stay ahead of future policies and regulations to limit GHG emissions. Companies that are seen as leaders are better able to influence policy makers and help shape developing legislation.

### ***Community Impacts of Climate Change:***

Climate Change is expected to affect all parts of the globe, but resilience of individual communities will vary with the level of organization, and access to resources and adaptation-related information.

- **Water availability and quality**, with the droughts, floods and severe storms increasing in frequency and intensity. As the climate changes in response to global warming, longer and more severe droughts are projected for the western U.S. and other typically dry parts of the globe. The resulting dry conditions will [increase the pressure on groundwater supplies](#) as more is pumped to meet demand even as less precipitation falls to replenish it.

- **Coastal sea level rise** will affect island nations as well as coastal communities. According to the UCS, average global sea level has increased eight inches since 1880, but is [rising much faster on the U.S. East Coast and Gulf of Mexico](#). Global warming is now accelerating the rate of sea level rise, increasing flooding risks to [low-lying communities](#).
- **Destruction of coral reefs:** As global temperatures rise, so too do average sea surface temperatures. These elevated temperatures cause [long-term damage to coral reefs](#). Scientists have documented that sustained water temperatures of as little as one degree Celsius above normal summer maxima can cause irreversible damage. Coral reefs are one of the most productive ecosystems on earth, serving as critical nurseries for ocean fish stocks, on which hundreds of millions of people depend for their livelihood, and food supply.
- **Agricultural production** will be affected as temperatures change and water supplies (particularly rainfall) shift. Regions that are colder now, will likely have longer growing seasons with a warming world, but in warmer regions, temperatures might become too high for certain crops to grow.
- [Wildfires are increasing](#) and wildfire season is getting longer in the Western U.S. as temperatures rise. Higher spring and summer temperatures and earlier spring snow-melt result in forests that are hotter and drier for longer periods of time, [priming conditions for wildfires to ignite and spread](#).
- **Health:** Climate change has significant implications for our health. Rising temperatures will likely lead to [increased air pollution](#), a [longer and more intense allergy season](#), the [spread of insect-borne diseases](#), more [frequent and dangerous heat waves](#), and [heavier rainstorms and flooding](#). All of these changes pose serious, and costly, risks to public health.
- **Certain types of extreme weather events** will increase, including [heat waves, coastal flooding, extreme precipitation events, and more severe droughts](#). Global warming also creates conditions that can lead to more powerful hurricanes.
- **Growing risks to our electricity supply:** Our aging electricity infrastructure is increasingly [vulnerable to the growing consequences of global warming](#), including sea level rise, extreme heat, heightened wildfire risk, and drought and other water supply issues.

*Resources used for information in this section from:* EPA: [Climate Change website](#) and the brochure, [Climate Change and Society](#) and the Union of Concerned Scientists: [Global Warming Impacts](#)

## **Resources:**

### **Organizations promoting science-based GHG reductions, which offer resources to companies:**

- [Science Based Targets \(Partner Organizations: WRI, CDP, WWF, UN Global Compact\)](#) – SBT is an initiative designed to enable companies to set targets consistent with the level of decarbonization required by science to limit global warming to less than 2°C compared to pre-industrial temperatures.
- UN Global Compact: <https://www.unglobalcompact.org/take-action/action/climate>

### **Information Resources on Climate Change:**

- [World Resources Institute](#)
- [Union of Concerned Scientists](#)
- [NASA](#)
- [US EPA](#)
- [McKinsey & Co.](#)
- [Bloomberg New Energy Finance](#)

- [CDP Global Climate Change Report 2015](#)

## **SBT Resolution example, filed by Walden Asset Management:**

### **Greenhouse Gas Reduction - Science-Based Targets 2017 – Emerson**

**RESOLVED:** Shareholders request Emerson Electric adopt time-bound, quantitative, company-wide goals for reducing total greenhouse gas (GHG) emissions, taking into account the goals of the Paris Climate Agreement, and issue a report at reasonable cost and omitting proprietary information on its plans to achieve these goals.

**Supporting Statement:** In December 2015, representatives from 195 countries adopted the Paris Climate Agreement, which specifies a goal to limit the increase in global average temperature to well below 2°C above pre-industrial levels and pursue efforts to limit temperature increases to 1.5°C. In order to meet the 2-degree goal, climate scientists estimate it is necessary to reduce global emissions by 55 percent by 2050 (relative to 2010 levels), entailing a US reduction target of 80 percent.

Noting government action and policy shifts ensuing from these commitments, BlackRock, the world's largest asset manager, has stated that "climate change risk has arrived as an investment issue" and that "regulatory risks are becoming key drivers of investment returns."

Over half of S&P 500 companies have set GHG emissions reduction targets, including several of Emerson Electric's peers:

- Rockwell Collins: reduce greenhouse gas emissions intensity by 30 percent by 2022 compared to a 2008 baseline.
- Honeywell: reduce greenhouse gas emissions intensity by 10 percent from 2013 levels. This is Honeywell's third goal, having already met previous goals to reduce GHG emissions intensity by 15 percent from 2011 levels. Furthermore, the company reduced total GHG emissions by 30 percent and improved energy efficiency by 20 percent between 2004 and 2011.
- ABB: reduce energy intensity by 20 percent by 2020 from a 2013 baseline.

As a critical element of their GHG reduction goals, several peers also seek to improve energy efficiency. For example, Honeywell reports in its 2015 CDP response that it has projects related to energy efficiency underway that will result in annual savings exceeding \$8 million, all with payback periods of 3 years or less.

Research affirms that investments in energy efficiency are usually profitable and low-risk while offering an effective way to reduce GHG emissions and manage volatile energy costs.

In 2013, CDP found that four out of five companies earn a higher return on carbon reduction investments than on their overall corporate capital investments, and that energy efficiency improvements earned an average return on investment of 196%, with an average payback period between two and three years. Money saved from energy efficiency can be reinvested into the business, benefiting shareholders.

While Emerson Electric's products help its clients reduce energy usage and climate impacts, our company has not publicly set GHG emissions reductions targets for its own operations. By not setting and pursuing GHG reduction goals, Emerson may not achieve the benefits realized by its peers—a competitive disadvantage for the company and shareholders alike.

Last year, 37% of shares (excluding abstentions) voted in favor of this resolution, a substantial level of support that management should not ignore.