

Consulting Services for Industrial Refrigeration



In accordance with the 2015 Paris Agreement, the world must reach **Net Zero** greenhouse gas emissions early in the second half of the present century. That will require the transformation of economies and societies alike. Many countries and corporations are setting their aspirations to achieve **Net Zero** goals by 2050.

Heating and industrial cooling processes are in high-energy demand.



Decarbonization of existing and new heating and cooling processes means getting them less dependent on fossil fuels, by using renewable energy and electrification.

Electrification refers to using technologies such as heat pumps that operate with electricity instead of burning fossil fuels such as oil, gas, and **coal**.



Energy Efficiency

Energy efficiency is the use of less energy to perform the same task or produce the same result. Energy-efficient homes and buildings use less energy to heat, cool, and run appliances and electronics, and energy-efficient manufacturing facilities use less energy to produce goods.

Energy efficiency is one of the easiest and most cost-effective ways to combat climate change, reduce energy costs for consumers, and improve the competitiveness of U.S. businesses.

Energy efficiency is also a vital component in achieving Net Zero emissions of carbon dioxide through decarbonization.

Electricity and Renewables represent only 22% of energy sources in the Industry Sector. Fossil fuels are responsible for 78%, which are opportunities for decarbonization.



Consulting Services for Industrial Refrigeration



U.S. Green Building Council: Chapter 8 – Energy & Atmosphere

Primary goals:

- · Reducing energy demand
- Increasing energy efficiency
- Replacing fossil fuels with renewable energy
- Eliminating the use of harmful refrigerants
- Monitoring ongoing performance

Associations memberships:



We are offering the following services:

- Analysis of current industrial refrigeration systems
- Evaluation of different industrial refrigeration system designs, looking for energy efficiency during the system life cycle
- Evaluation of heat pump utilization in the heating process, to reduce carbon emissions
- Evaluation of heat recovery opportunities
- Evaluation of Net Zero and Decarbonization opportunities
- Total cost of ownership analysis of different systems options

Contact Us:

We are an independent consulting company with extensive expertise in industrial refrigeration. We are passionate about world sustainability and helping customers with their decarbonization and energy efficiency journeys to achieve Net Zero targets.

Jose Augusto Castro Chagas: joseaugusto@castrochagas.com

Bennu Productions LLC Phone: 305-215-2696