**Cargill Protein Headquarters & Sustainability**

Cargill Protein is committed to preserving the environment and proud to be making progress towards its sustainability goals. An emphasis on Cargill’s aspirational and directional focus on sustainability was incorporated in the design of the new Cargill Protein headquarters. The building was constructed with hundreds of thousands of pounds of recycled content, and the design reduces energy and water consumption while also improving the indoor environmental quality of the facility.

**Materials and Resources**

Preference was given during design to materials with high recycled content, and reclaimed wood and other reclaimed materials were used.

* 706,600 pounds of recycled content was used, or about the weight of 294 bulls or 442 cows
* 468,400 pounds of recyclable content was used, or about 195 bulls or 293 cows

Cargill Protein also encourages employees to do what they can to meet sustainable goals. Recycling bins and water stations are conveniently located throughout the new building to encourage recycling and drinking from reusable water bottles.

**The Site and Landscape**

**Urban site selection**

The project was constructed on a previously developed site near public transportation and many amenities.

**Transforming hardscape to greenscape**

Prior to construction, the site was nearly fully covered with hardscape and an existing building which was a strain on the local storm water system. The new Cargill headquarters reduces the hardscape and adds landscaping to help rainwater infiltration and promote vegetation rather than letting water rush into the storm drain. The added landscape serves as an amenity for the occupants and community, while fostering the local ecology.

**Energy efficient roof**

The roof is a highly reflective material, so that the heat from the sun is radiated back up and helps mitigate the urban heat island effect.

**Bike racks and showers**

Four showers are provided for employees that commute to work via bicycle. There is covered and protected bicycle storage on site in the parking garage.

**Nature Connection**

Employees can enjoy a short walk through nature in the landscaped courtyard. Access to nature has proven benefits in reduced stress, reduced hypertension, and improved sleep patterns.

**Water Reduction**

**Low/reduced flow plumbing fixtures**

Low and ultra-low flow domestic fixtures were installed at the new Cargill headquarters, resulting in an annual domestic water use reduction of 30 percent.

**Energy Consumption**

The building was designed and constructed to meet Leadership in Energy and Environmental Design (LEED) Silver certification standards. LEED is a rating system that is intended to provide framework for measurable goals in construction, design, operational and maintenance solutions. Constructing the new headquarters to LEED standards sets a definitive sustainability goal that is within reach.

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| **LED light fixtures**: All lighting installed is high efficiency LEDs. | **Lighting controls:** Distributed lighting controls are provided for all interior areas, and a relay-based system for timeclock-controlled areas. | **Sun shading to reduce heat gain**: Sunshades and deep-set glass reduce solar heat gain in turn reducing the amount of mechanical loading needed to cool the building. |
| **High Efficiency HVAC system:** Air cooled chillers and electric heat were used as the basis of the system. One chiller will be provided with waterside economizer for “free” cooling in winter months.  | **Energy efficient exterior building glass:** A high efficiency low-e insulated glass unit was chosen, so that light is let into the building, but heat is reflected out, limiting the burden on the mechanical systems.  | **MEP Commissioning**: A third party commissioning agent will review the design and operation of the systems as part of a quality control process.  |
| **Smart utility meters** are installed on all utility services (electricity, natural gas, domestic water, chilled water, hot water, etc.). | **Upgraded lighting controls:** Additional management provides network room scheduling, remote help desk, global device management, and data collection and reporting. This data download can help facility managers proactively manage the building and optimize their building usage. | **Additional utility sub-meters:** Meters and infrastructure were installed to measure electric subsystems including HVAC, lighting, general power, etc. This contributes to a greater control of data that can be used to “tune” the building to its use and reduce energy consumption.  |

**Indoor Environmental Quality**

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| **Outside air ventilation:** Dedicated outside air units (DOAS) with energy recovery features provide ventilation air to the building. | **Low VOC materials used**: The design team gave preference to materials that contain low levels of volatile organic compounds. | **Non-CFC refrigerants used:** No chlorofluorocarbon (CFC)-based refrigerants were used in new heating, ventilating, air-conditioning, and refrigeration (HVAC&R) systems. |
| **Reduced dirt & debris:** Vestibules are sized to allow for proper cleaning of shoes with permanent walk off mats, limiting the debris and contaminants in the building.  | **Indoor Ventilation:** All spaces have outdoor air provided in accordance with ASHRAE 62.1 Standards (Ventilation for Acceptable Indoor Air Quality). | **Daylighting & Views**: More than 90 percent of all open office/office areas have access to natural daylight & exterior views. |
| **Filtered water:** Bottle filling stations are provided at the drinking fountains, and filtered water stations are provided in each kitchenette. | **Ergonomic Furniture:** 100 percent of the desks are sit-to-stand, provided for employee comfort. | **Wellness Rooms** have been provided for employee use ranging from general wellness and religious practice to new mother’s rooms. |