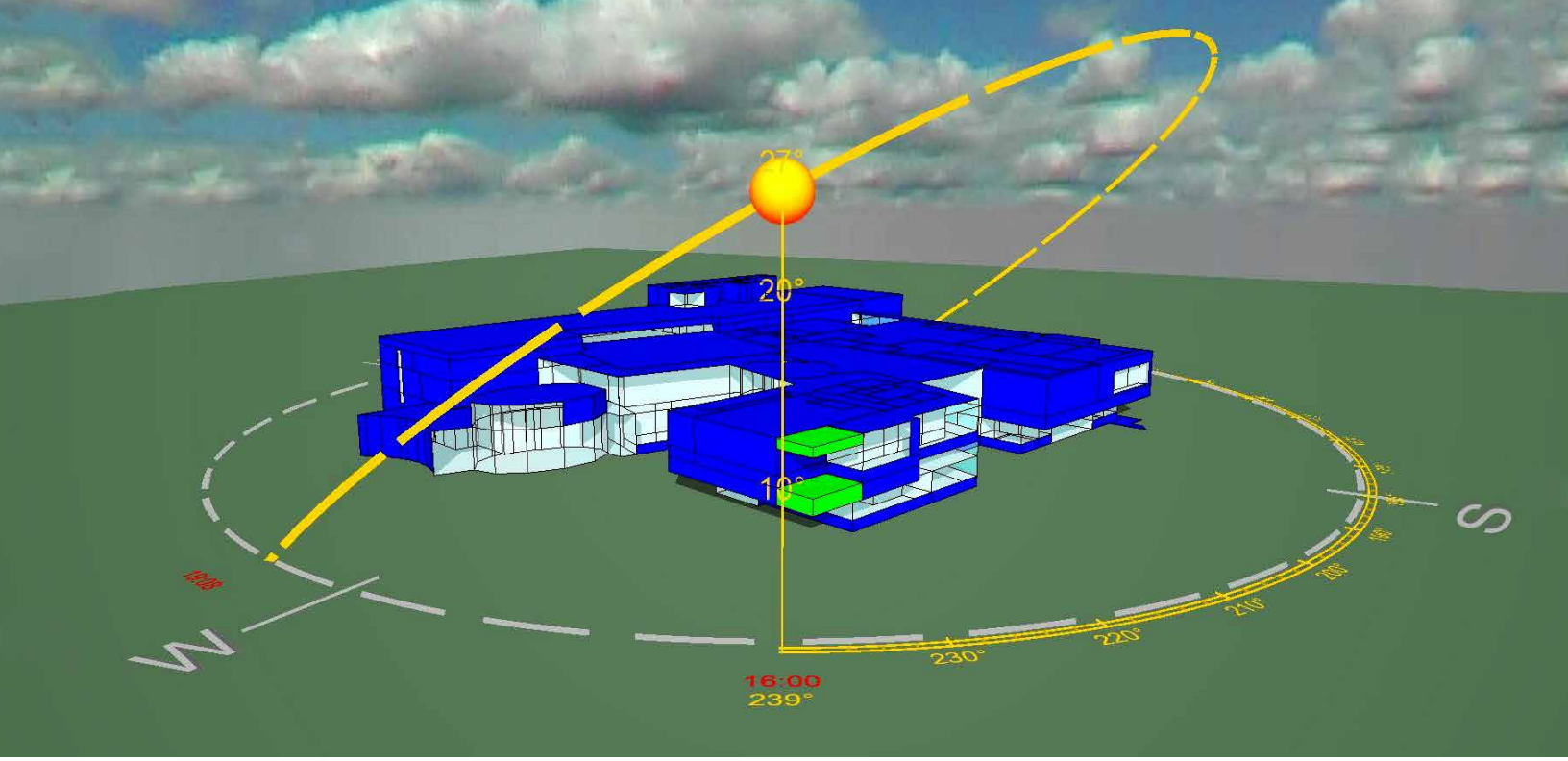

TOM THURSTON, DIRECTOR, CAPITAL DEVELOPMENT

BUILDING YOUR MUSEUM

A Sustainable Design Approach

Our new Museum will have a large footprint, and therefore a large impact on the environment. It has been calculated that buildings generate up to 35% of all greenhouse gases. Thirty-five per cent of landfill waste comes from construction and demolition activities, and 80% of all urban water use is consumed in and around buildings.

Because the Museum has a mandate to collect and preserve Alberta's natural and human heritage, it makes good sense to advocate for environmental stewardship.

The LEED (Leadership in Energy and Environmental Design) is a point-based rating system; points are earned for quantified building attributes considered environmentally beneficial. LEED is the most recognized green building rating system in North America. Our new Museum, like other new provincial buildings, was expected to meet the LEED Silver performance but we are now on target to meet LEED Gold!

A LEED project is rated on a total of 110 points:

- 40 – 49 awarded points = LEED Certified
- 50 – 59 awarded points = LEED Silver
- 60 – 79 awarded points = LEED Gold
- 80 + awarded points = LEED Platinum

Points are awarded in seven areas—site development, water efficiency, energy efficiency, material selection, indoor environmental quality, innovation in design and regional priority.

What does this all mean?
The long-term benefits of LEED buildings have proven to be good for both the environment and the bottom line:

- Improved indoor environment results in better comfort and overall health
- Lower maintenance costs
- Lower operating costs
- More durable building reduces future costs for lifecycle repairs

At our last internal review, we were on target for LEED Gold Certification. It will take a team effort with our builder, LEDCOR, our design team of Dialog and Lundholm Associates and the Project Delivery Branch of Alberta Infrastructure to verify our scorecard at the project's completion.

PHOTOS

FIGURE 1 As part of the LEED process our team uses energy modelling software to simulate heat flows in and out of the building. This allows the engineers to develop a design that targets low energy use.