

CIRS Sustainable Design Goals

DESIGN PROCESS

- Paperless 3D virtual design
- 2. Lifecycle Assessment (LCA) on whole building design

SITE DESIGN

- 3. Neutralize ecological impact
- 4. Sustainable contributions to local community

ENERGY

- 5. Sustainable and renewable energy sources, net annual power generation and GHG neutral
- 6. Passive design strategies and very low energy requirements
- 7. 100% day-lighting illumination during the day
- 8. Extensive network of sensing, monitoring and control points adaptive controls.

WATER

- 9. On-site collection of rainwater to meet 100% of potable water requirements
- 10. All wastewater will be collected and treated on site
- All storm water will be controlled, re-used and discharged on site

RESOURCE CONSERVATION

- 12. Minimize resource consumption and GHG impact of building construction by maximizing life, flexibility and recycling potential of the building
- 13. All solid waste generated to be reused or recycled
- 14. Maximize hours of operation and density of use
- 15. Sustainable mobility program in lieu of dedicated parking

OCCUPANT HEALTH

- 16. Workspaces will be 100% day-lit
- 17. Very pure indoor air quality and user control over comfort conditions
- 18. CIRS will oxygenate indoor and exterior environments
- 19. Design of workspaces based on healthy body and mind principles

BUILDING OPERATION AND MAINTENANCE

20. Seamless integration of design and ongoing operations

CIRS OUTREACH

- 21. Provide the building infrastructure and resources required to advance the knowledge of sustainable design strategies, in partnership with manufacturers, policy makers and CIRS researchers
- 22. "Living lab" for CIRS researchers and software companies to develop and test predictive software for energy efficiency, energy distribution, thermal mass, ventilation models, IAQ, acoustics, and daylighting effectiveness
- 23. Minimize external and community environmental impacts of CIRS's staff and visitors
- 24. CIRS will disseminate sustainable design practices, knowledge and experience