

# ENERGY

## SUSTAINABLE ENERGY SOLUTIONS CENTER



The Sustainable Energy Solutions centre comprises a team of international researchers dedicated to excellence in energy research. We focus on industry, public sector, and community/municipality interests, with primary emphasis on energy challenges in the Mining Industry across the globe.

Our innovations in energy management, energy conservation and energy technology aim to lower the cost of energy and add value in sustainability metrics for all stakeholders.

### AREAS OF EXPERTISE

- ◇ Whole and life cycle, power, heat and fuel audits and demand profiling
- ◇ Appraisal and concept development of energy consumption reduction technologies (including energy efficiency) for the minerals sector
- ◇ Integration of renewable energy technologies into the mining sector
- ◇ Renewable heat technology application development including heat recovery and utilization
- ◇ Investigation of revenue enhancement opportunities via carbon trading and the clean development mechanism
- ◇ Greenhouse gas mitigation and avoidance, development of innovations in carbon capture technology



## PROJECTS INCLUDE:

- **CryoVent project**
- **Mine to Bullion Energy Audits (MBeA)**
- **Floating Photovoltaics**
- **Hydraulic Air Compressor (HAC)**
- **Optimal Mine Site Energy Supply (OMSES)**
- **Wind2Ice**
- **Small Modular Reactors**



## VISION & PRIORITIES

- ⇒ The Sustainable Energy Solutions group aspires to be an internationally recognized centre of research excellence for Energy in Mining. In achieving this goal, The Sustainable Energy Solutions members:
- ⇒ Strive for research excellence
- ⇒ Establish a personal development plan to encourage and foster striving for excellence
- ⇒ Aim to publish their work in the highest caliber international peer reviewed journals
- ⇒ Present their work at internationally esteemed academic conferences or those providing the greatest knowledge transfer impact for industry
- ⇒ Commercially exploit their innovations as expeditiously as possible for the benefit of the mining industry worldwide and society at large
- ⇒ Warmly welcome the addition of expertise in individuals at all ages, all levels of attainment, from all nations, and from a diverse range of subject disciplines
- ⇒ Always responsibly deploy research funding, whatever its source

For more information please contact MIRARCO at 705-671-3333 or email [info@mirarco.org](mailto:info@mirarco.org)