

FUSION ENERGY WORKSHOPS – Note Sheets Summary

The Alberta Council of Technologies hosted two Fusion for Energy Workshops on October 25th at Alberta Innovates Technology Futures site in Calgary and on October 26th at the site in Edmonton. Attendees had been informed through email that the objectives of the workshops were to provide highlights of:

- Our study team's visits to fusion research sites in Asia, Europe and the USA
- Associated pre- and post-ignition research and commercial opportunities.

Registered to attend were 37 attendees for Calgary and 51 for Edmonton. Attendees participated in discussions for identifying pre-and post-research and commercial opportunities for Alberta and the socio-economic impact of fusion for energy. Each of the registrants received a Notes Sheet that they were asked to return at the workshop's wrap-up. Note Sheets were received from 21/30 attendees (70%) in Calgary and 14/46 attendees (30%) in Edmonton. Results now follow.

EXECUTIVE SUMMARY

VISION

Alberta as a leader in advancing the development and commercialization of fusion technologies as a clean energy supplement and a future alternative to carbon energy.

PROPOSED PROJECTS

An Alberta Centre is warranted as a reliable source of information and for sustaining interest, building capacity, advising on research/commercial priorities and maintaining international relations.

ALBERTA's OIL & GAS INDUSTRY

Fusion's impact is speculative at present for USAGE – as a near-term heat benefit and TIMING – for the long term displacement of carbon fuels.

RESEARCH & COMMERCIALIZATION

Align and enhance Alberta's public research and commercial capacities in e.g.,: materials science, lasers, optics, photonics, instrumentation and computer modeling.

PARTNERING

Alberta should stake out a leadership position - promoting international collaboration and bridging of research and emerging technologies, commercialization and socio-economic policy

CHALLENGES

Leadership is warranted - uncertainties prevail on timing and priorities, partnering and the socio-economic implications of fusion energy

TIMING

Increasing competition especially from Asia and project costs among fusion ignition options and the promise of fusion energy are elevating interest in timing.