FUSION POWER: MAJOR SAFETY AND ENVIRONMENTAL ADVANTAGES WITH Viable Economics

Fusion offers:

• No greenhouse gas production
• A high degree of inherent safety
• Viable economics
• Plentiful and widespread fuel resources

Schematic view of a commercial fusion power plant

SAFETY, ENVIRONMENTAL IMPACT AND SOCIAL ACCEPTANCE

Fusion has well—attested and attractive inherent safety and environmental characteristics to gain public acceptance:

• Activation is sufficiently short—lived that almost all of the activated material could be recycled or given shallow—land burial, after a few decades.

• The worst accident would result in only limited hazards: comparable to those to which we are exposed from natural causes.

ECONOMICS AND MARKET PENETRATION SCENARIO

• Energy scenario modelling has shown that fusion could contribute significantly to large—scale energy production during the second half of the century.
• The cost of fusion electricity is expected to be comparable with that from other environmentally responsible sources.

Participants to the Implementing Agreement on Environmental, Safety and Economic Aspects of Fusion Power: Canada, European Union, Japan, Russian Federation, USA