INTERNATIONAL IRRADIATION ASSOCIATION

Ebeam- Xray

HEPRO Cape

Cherin Balt

Communicate.
Educate.
Advocate.

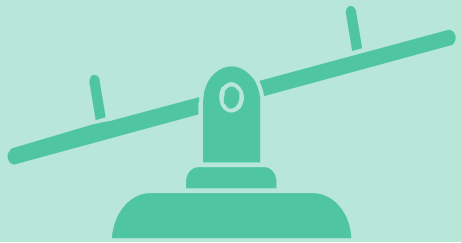
Why Do We Need an E-beam/X-ray Machine?

EXPERIENCE

40 years of gamma radiation experience

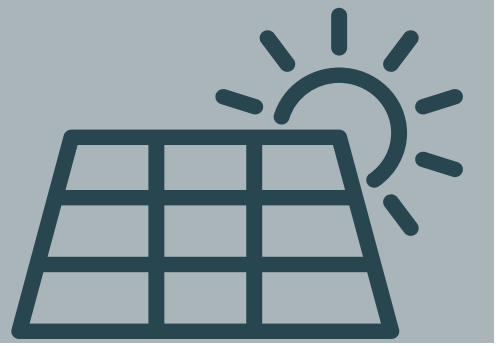
Co-60 SUPPLY

Shift prompted by Cobalt-60 shortage



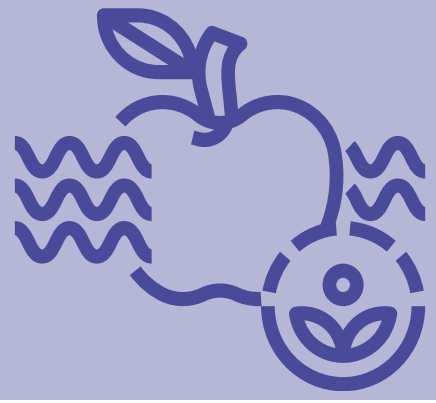
POWER

Need for stable, alternate energy sources

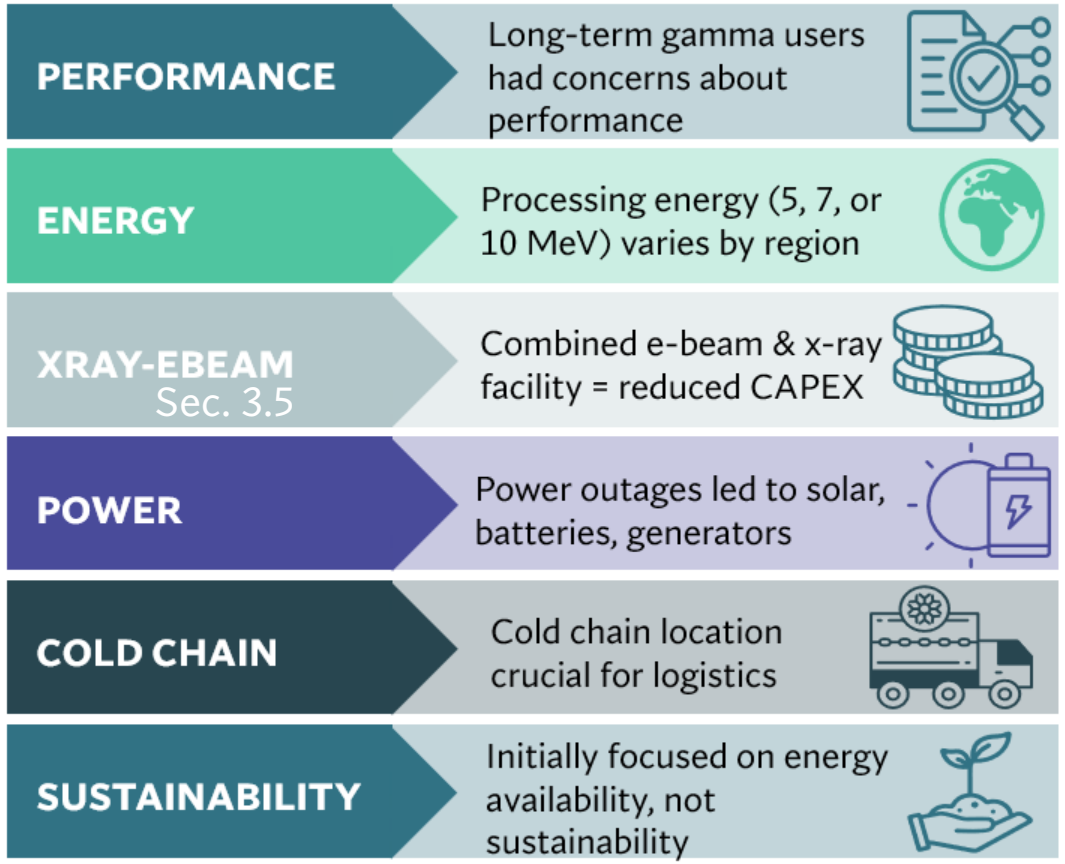


CUSTOMER REQUIREMENT

Phytosanitary



Technical Details: Customer Requirements & Logistics



Flow chart in Figure 3.1.1

Legislation: Regulatory Framework & Safety

South Africa (2010): Manufacturers responsible for food safety

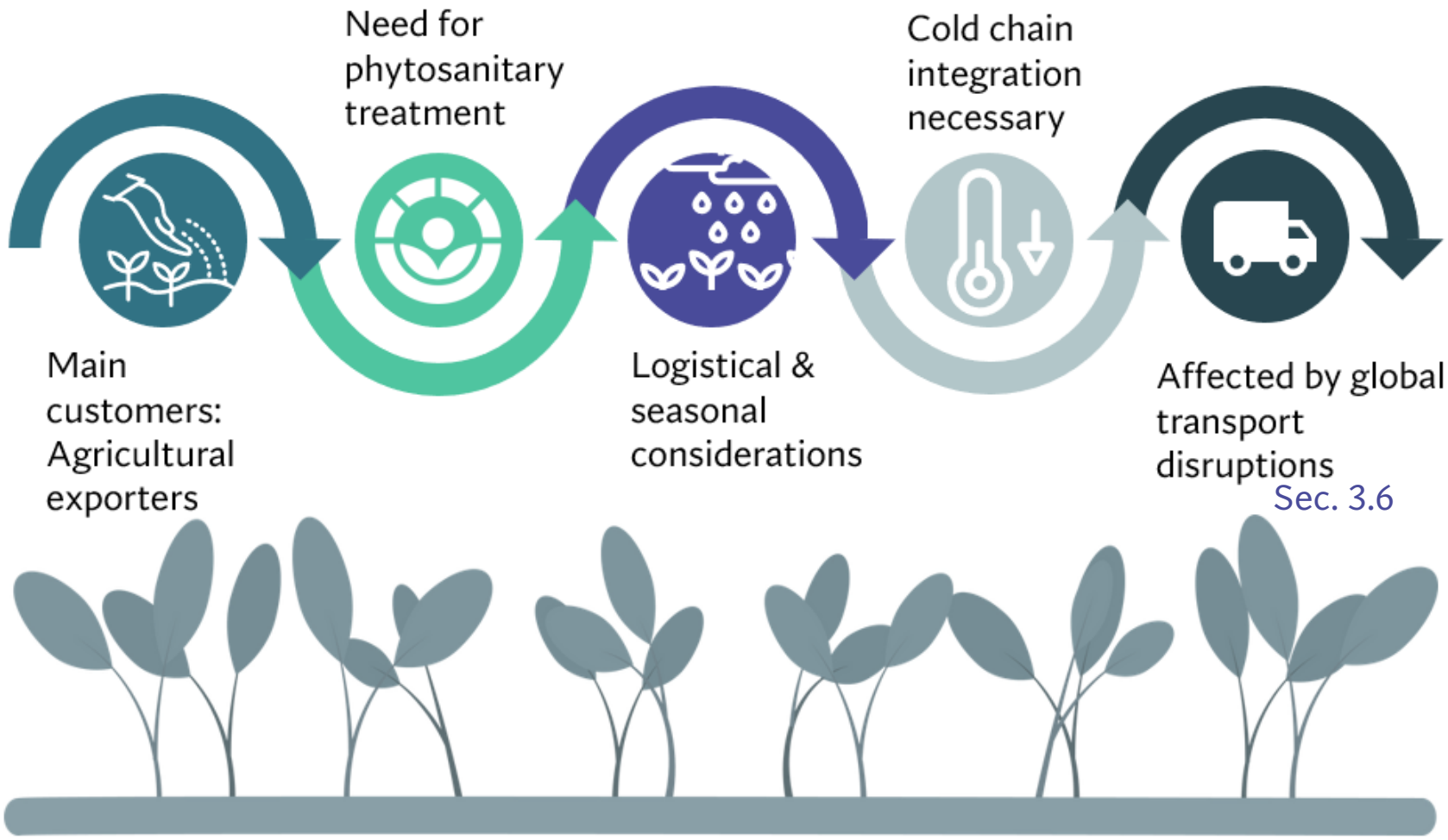
Europe permits but often rejects irradiated food

Need for international equivalence frameworks

Required impact assessments (environmental, visual).

Detailed planning essential for regulatory approval

The Market: Understanding the Customers



Sec. 3.6

International Codes and Timelines

REGULATIONS

Different countries have different dose and energy regulations

TIMELINE

Includes:
- Equipment delivery
- Facility design & EIA
- Construction & commissioning

DELAYS

Potential delays: power, red tape, export approvals

MANAGEMENT

Management: private vs. government control debated

Key Considerations for Success

Stable power supply is critical

Sec. 5.2.3

Investor confidence tied to feasibility & profitability

Grateful to tech partners for their support

Focused on tech viability, market needs, and legal compliance

INTERNATIONAL IRRADIATION ASSOCIATION

Global Voice for the Radiation Processing Industry

Communicate.
Educate.
Advocate.

Thank you

Presented by:
Cherin Balt. HEPRO Cape

07 May 2025