

**PAK ELECTRON BEAM IRRADIATION (PVT) LTD.
(PEBIL)
KARACHI – PAKISTAN**

**CASE STUDIES OF TECHNOLOGY ADOPTION BY
PRIVATE INDUSTRY IN PAKISTAN**

SPEAKER:

KAMRAN NADEEM

E-BEAM CONSULTANT / DIRECTOR BUSINESS PROMOTION

OVERVIEW



FOUNDATION OBJECTIVE



NEED ANALYSIS OF PAKISTAN



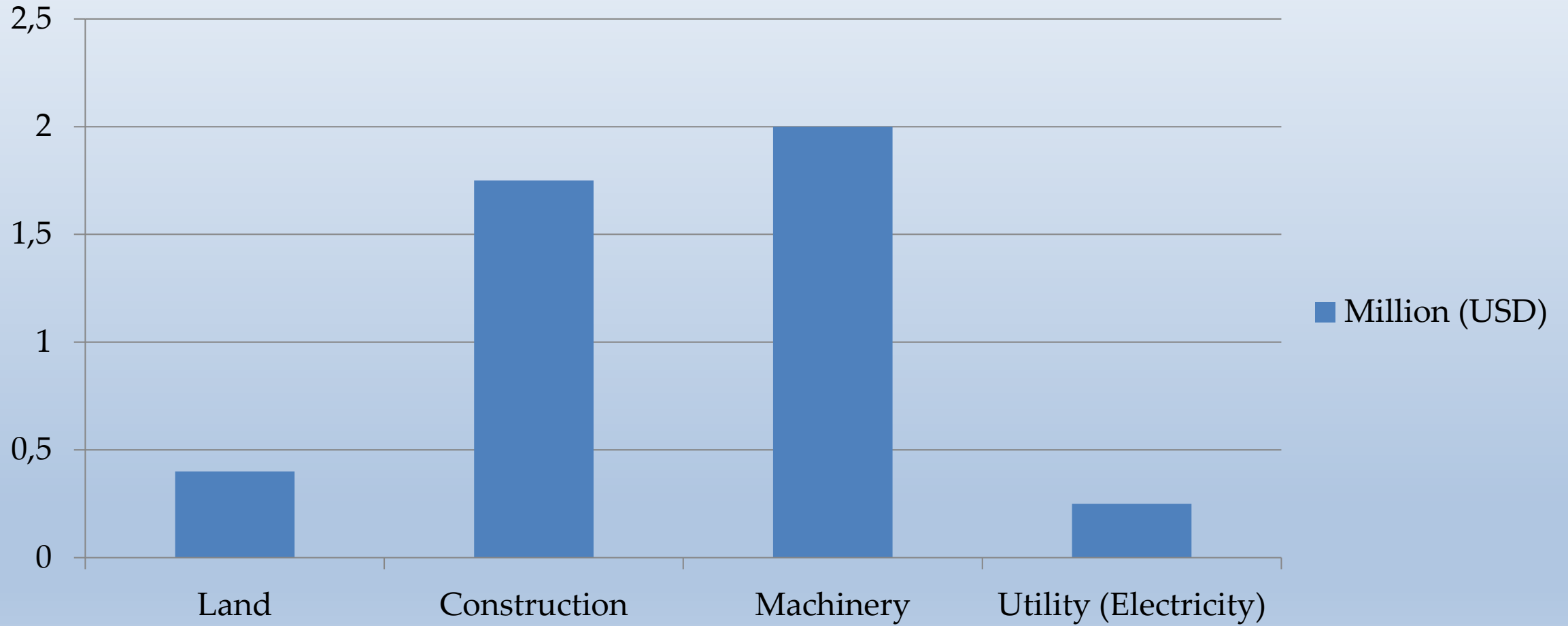
INVOLVEMENT OF STAKEHOLDERS

ELECTRON BEAM PROJECT CASE STUDY

- CONCEPT STARTED (2012)
- SEARCH FOR SUPPLIERS (2012)
- CONSTRUCTION STARTED (2016)
- PROJECT EXECUTED (2018)

CAPITAL COST AND RETURN (2016-2018)

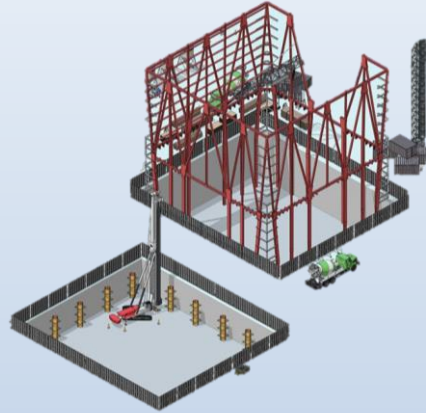
Million (USD)



POTENTIAL CHALLENGES FACED



CHOICE OF SUPPLIER



COMPLEX CONSTRUCTION DESIGN



TECHNICAL EXPERTS



UNAWARENESS OF TECHNOLOGY



NO COUNTRY REGULATORY STANDARDS

CHALLENGES TACKLED



SUPPLIER CHOSEN



VENDOR SUPPORT



AWARENESS SESSIONS / SEMINARS



FREE OF COST TRIALS

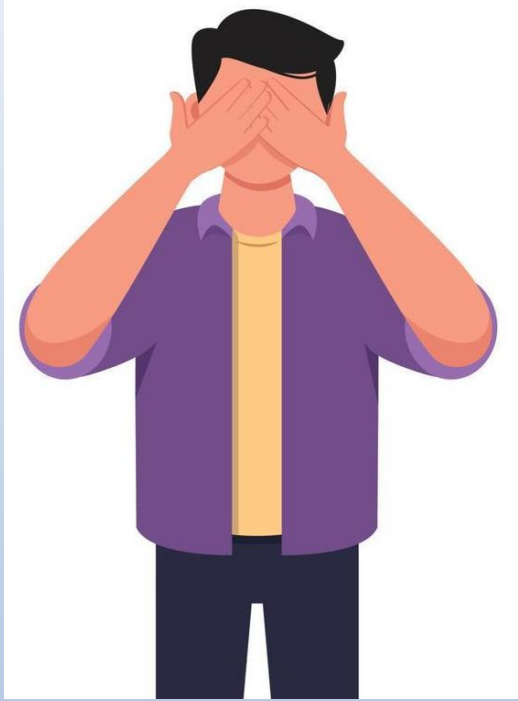


STANDARDIZED PROTOCOLS
IN PNRA

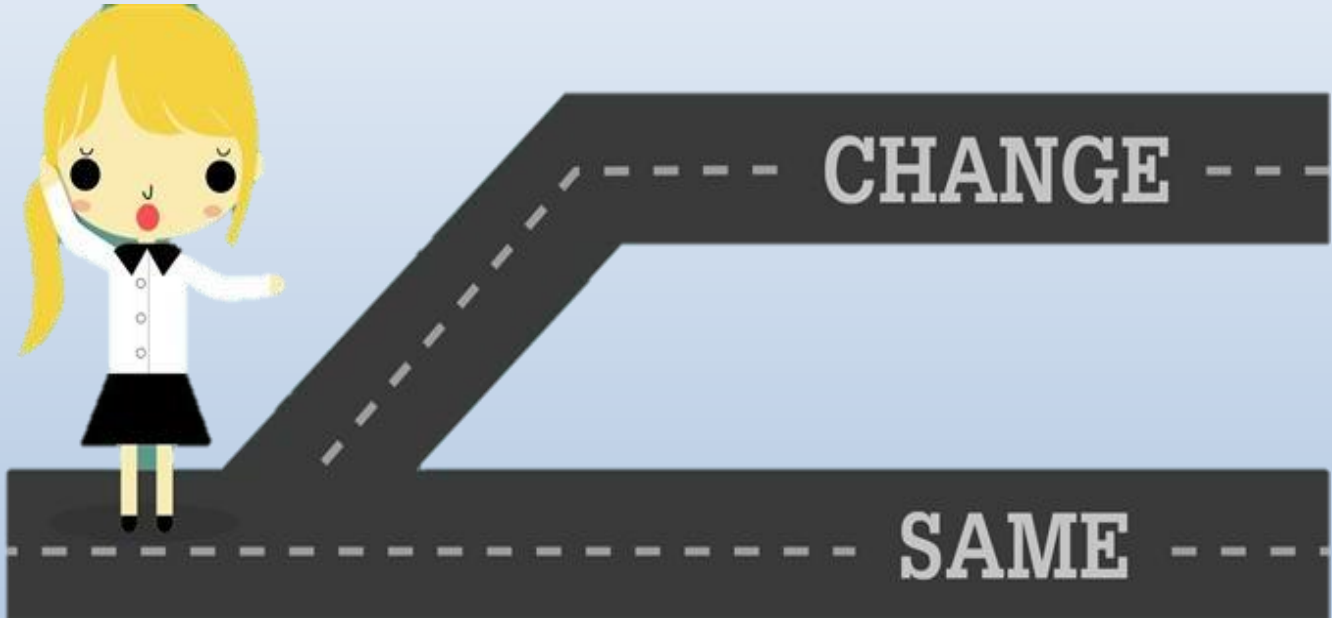


REGULATORY & INDIVIDUAL AUDITS

FROM FOOD TO OTHER INDUSTRIES



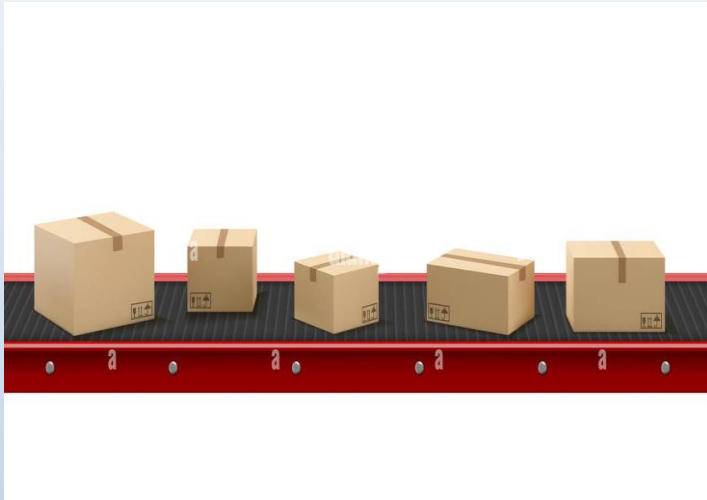
RELUCTANT TO MOVE



FROM FOOD TO OTHER INDUSTRIES



DOMESTIC IMPACT



COST SAVING

LOGISTIC SAVING



BOOST EXPORT



GREEN TECHNOLOGY

CURRENT ACTIVITES



SPICES

PHARMACEUTICALS



PACKAGING INDUSTRY

PRECIOUS STONES

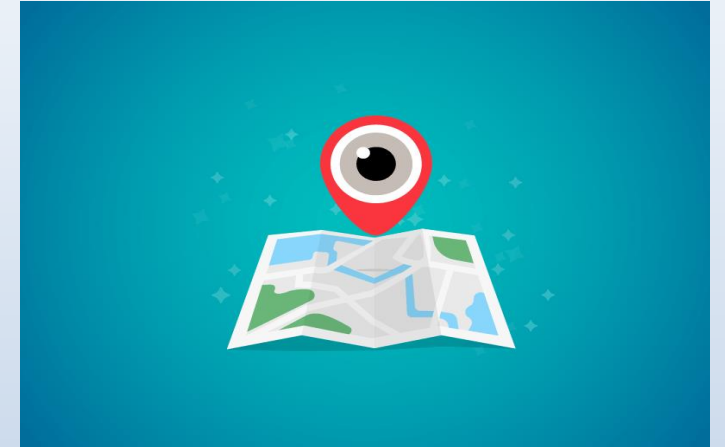
STRATEGIES TO ADOPT E-BEAM



1. COUNTRY NEED ANALYSIS



2. AWARENESS SEMINARS



3. PROJECT LOCATION



4. CHOICE OF SUPPLIER

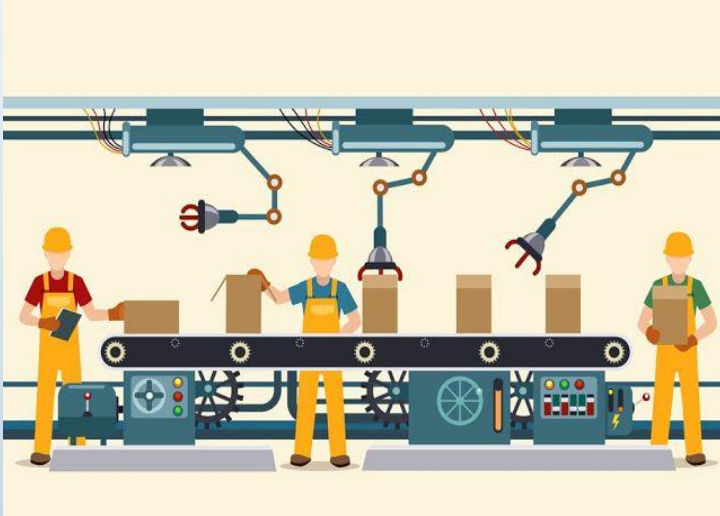


5. EXPERT CONSTRUCTION TEAM



6. EXPERT MARKETING TEAM

STRATEGIES TO ADOPT E-BEAM



7. EXPERT OPERATIONS TEAM



8. PATIENCE



FUTURE OPPORTUNITIES & CHALLENGES

- MORE AWARENESS AND ACCEPTABILITY IN LOCAL AND EXPORT MARKET
- NEED MORE R&D ON LOCAL MANUFACTURED PRODUCTS

PEBIL FACILITY IS AVAILABLE FOR ALL KIND OF LOCAL AND INTERNATIONAL R&Ds

THANK YOU

*Take Home Message: E-BEAM technology is a 100% **GREEN TECHNOLOGY** for Sterilization*