

**PART 6 – FINANCING SOCIAL INFRASTRUCTURE
DIFFERENTLY**

**SOUTH AFRICAN
ISOTOPE FACILITY
(SAIF)**

6 OCTOBER

THE PIPELINE SERIES

SIDSS  21

OUTLINE

The Presentation covers the following

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- 1 High Level Project Information
- 2 Investment Plan and Financing Gap
- 3 Capital Required
- 4 Project Risks and Mitigation
- 5 Project Implementation Milestones
- 6 Q&A



PROJECT

SOUTH AFRICAN ISOTOPE FACILITY (SAIF) – Flagship project of iThemba LABS, a national facility of the National Research Foundation

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Project Scope

Phase 1 of the project is the establishment of a new facility to increase the production of radioisotopes for **medical diagnostic and therapeutic procedures**, inclusive of new infrastructure to support the manufacturing facilities.

Phase 2 of the project concerns the development and establishment of new research infrastructure for basic and applied science with an emphasis on **innovative technology** in isotope production to **support the health sector**.

Developmental Impact

Enhancing South Africa's capabilities to address the growing impact of cancer and related diseases
Contribution to national fiscus through foreign exchange revenues – growth in global market share of products
Jobs during construction = 250
Jobs during operation = 40 (phase 1)
Jobs during operation = 30 (phase 2)

Project Sponsor(s)

NRF / iThemba LABS

Implementing Agent

NRF / iThemba LABS

Other Key Stakeholders

Department of Science and Innovation (DSI)



INVESTMENT PLAN AND FINANCING GAP

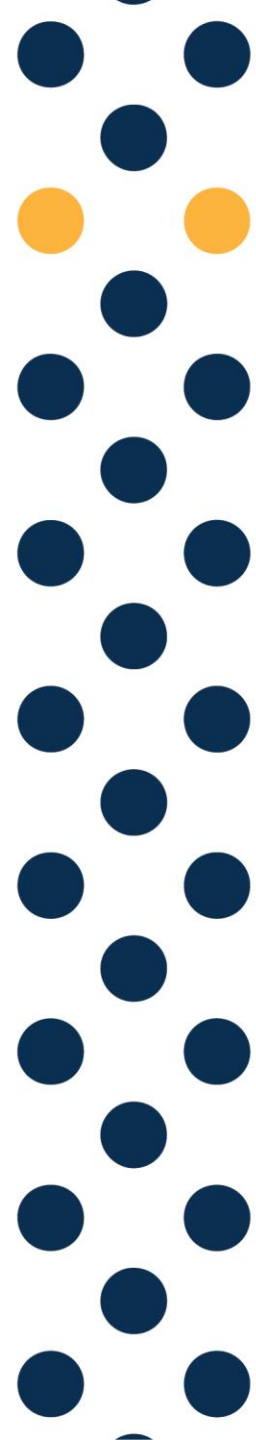
Estimated Capital Cost	Phase 1: R 591 m Phase 2: R 800 m	Funding Gap	Phase 1: R 354 m Phase 2: R 800 m
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- SAIF phase 1 (guaranteed full funding as a grant option): Funding is required to complete the infrastructure construction and associated production facilities to bring the South African Isotope Facility to full operational status.
- SAIF phase 2 (potential for co-funding through revenues generated from Phase 1): Funding is required for detailed design and construction of new research infrastructure for basic and applied science with an emphasis on **innovative** radioisotope production for **cancer diagnosis and treatment**, as well as re-investment into the **renewal** of ageing research infrastructure.

Sources of Funding		Uses	
Equity	-	Project Identification	-
	-	Project Development (construction)	R 1 381 m
	-	Bank Debt Process	-
Grant Funding	R 1 391 m	Project Management	R 10 m
		Other Costs	-
TOTAL	R 1 391 m	TOTAL	R 1 391 m



CAPITAL REQUIRED



- Phase 1: Equipment and Construction Costs – Project is already in implementation phase

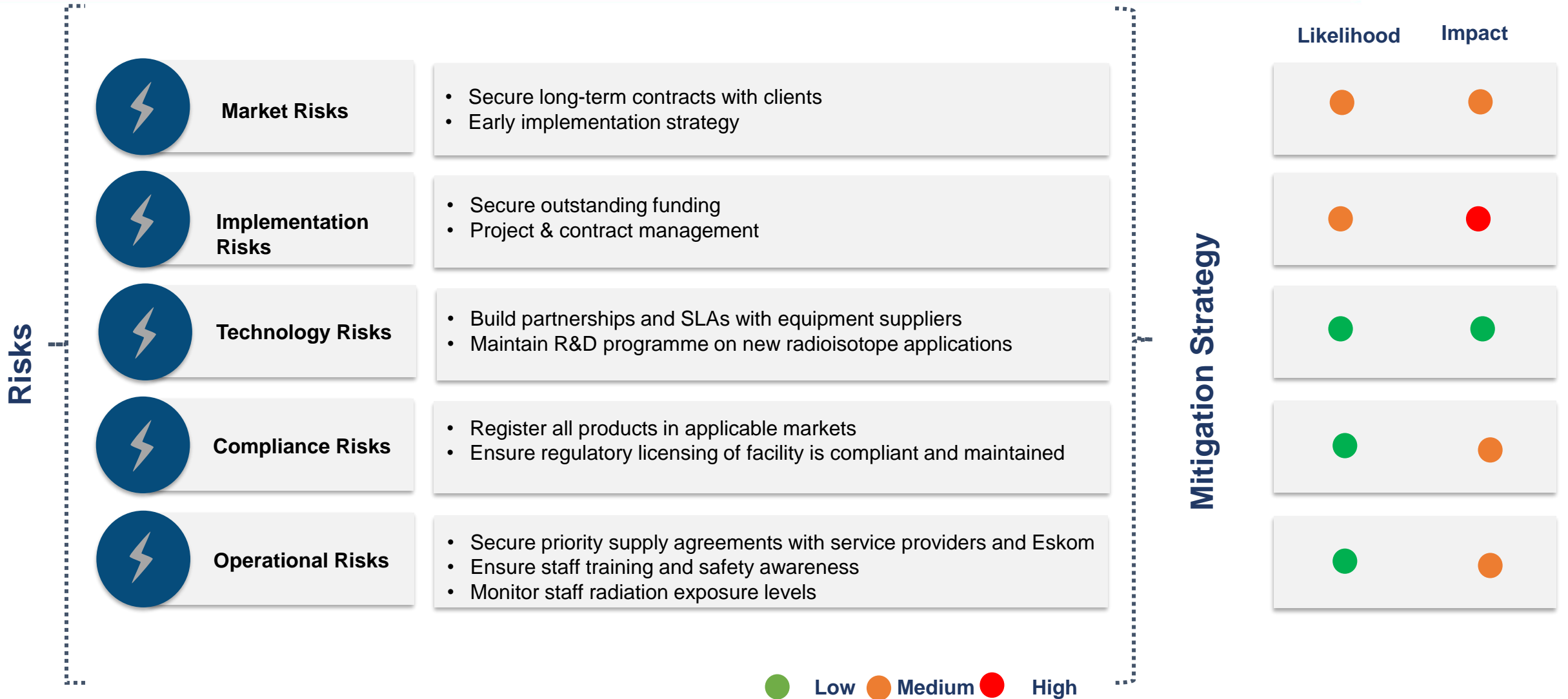
ITEM	actual YTD		forecast		TOTAL R ('000)
	2019/20 R ('000)	2020/21 R ('000)	2021/22 R ('000)	2022/23 R ('000)	
70 MeV cyclotron & IBA beamlines	R 95 676	R -	R 131 752	R 22 538	R 249 966
Building & shielding costs	R 1 158	R 3 664	R 75 127	R 17 236	R 97 185
Site Services Costs	R 1 421	R 3 841	R 139 772	R 18 543	R 163 577
Beam Lines Equipment (iTl)	R -	R 1 931	R 9 800	R 400	R 12 131
Isotope Production Facilities	R -	R 3 825	R 28 215	R 22 849	R 54 888
Additional manpower costs for project phase	R 3 656	R 2 726	R 3 600	R 3 600	R 13 582
Total CAPEX:	R 101 911	R 15 986	R 388 266	R 85 166	R 591 329

ITEM	2019/20 R (m)	2020/21 R (m)	2020/21 R (m)	2020/21 R (m)	TOTAL R (m)
Amount spent/committed	R 101.9	R 16.0	R 388.3	R 85.2	R 591.3
Funding secured (National Treasury / BFI)	-R 167.9	R -	R -	R -	-R 167.9
Funding secured (DSI / NEP)	-R 70.0	R -	R -	R -	-R 70.0
Funding balance required / (surplus)	-R 136.0	-R 120.0	R 268.3	R 353.4	R 353.4

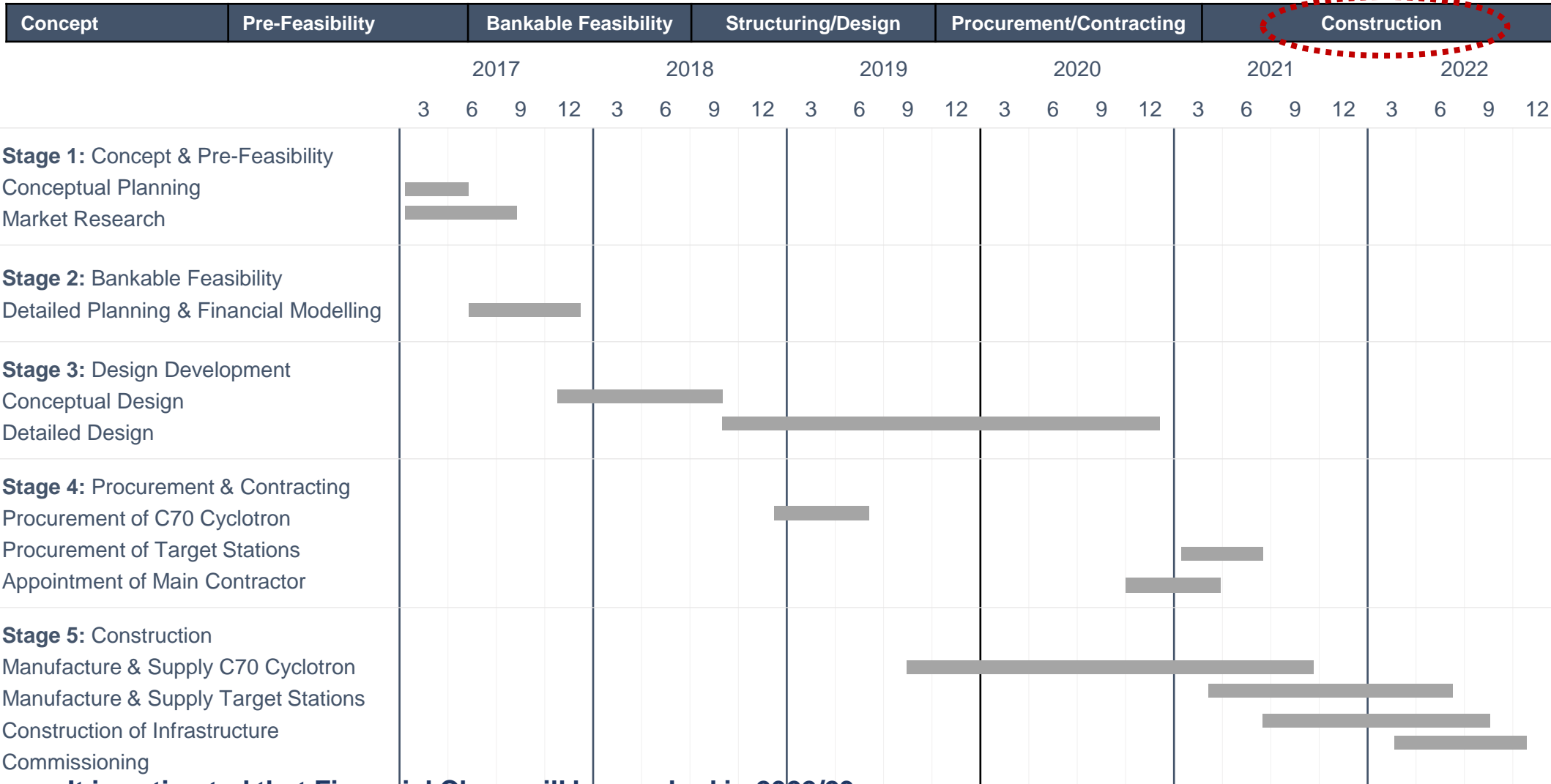
- Phase 2: Equipment and Construction Costs – Project is in detailed feasibility phase

ITEM	2021/22 R ('000)	2022/23 R ('000)	2023/24 R ('000)	2024/25 R ('000)	TOTAL R ('000)
Rhodotron Accelerator Equipment	R -	R -	R 211 696	R -	R 211 696
Infrastructure Construction	R -	R 13 535	R 54 139	R 67 674	R 135 348
Tc-99 Production Equipment	R -	R -	R 25 944	R 25 944	R 51 889
Beam Lines Equipment	R -	R 12 661	R 163 942	R 163 942	R 340 546
Existing Accelerator Upgrades	R -	R -	R 30 260	R 30 260	R 60 521
Total CAPEX:	R -	R 26 196	R 485 983	R 287 821	R 800 000

PROJECT RISKS AND MITIGATION



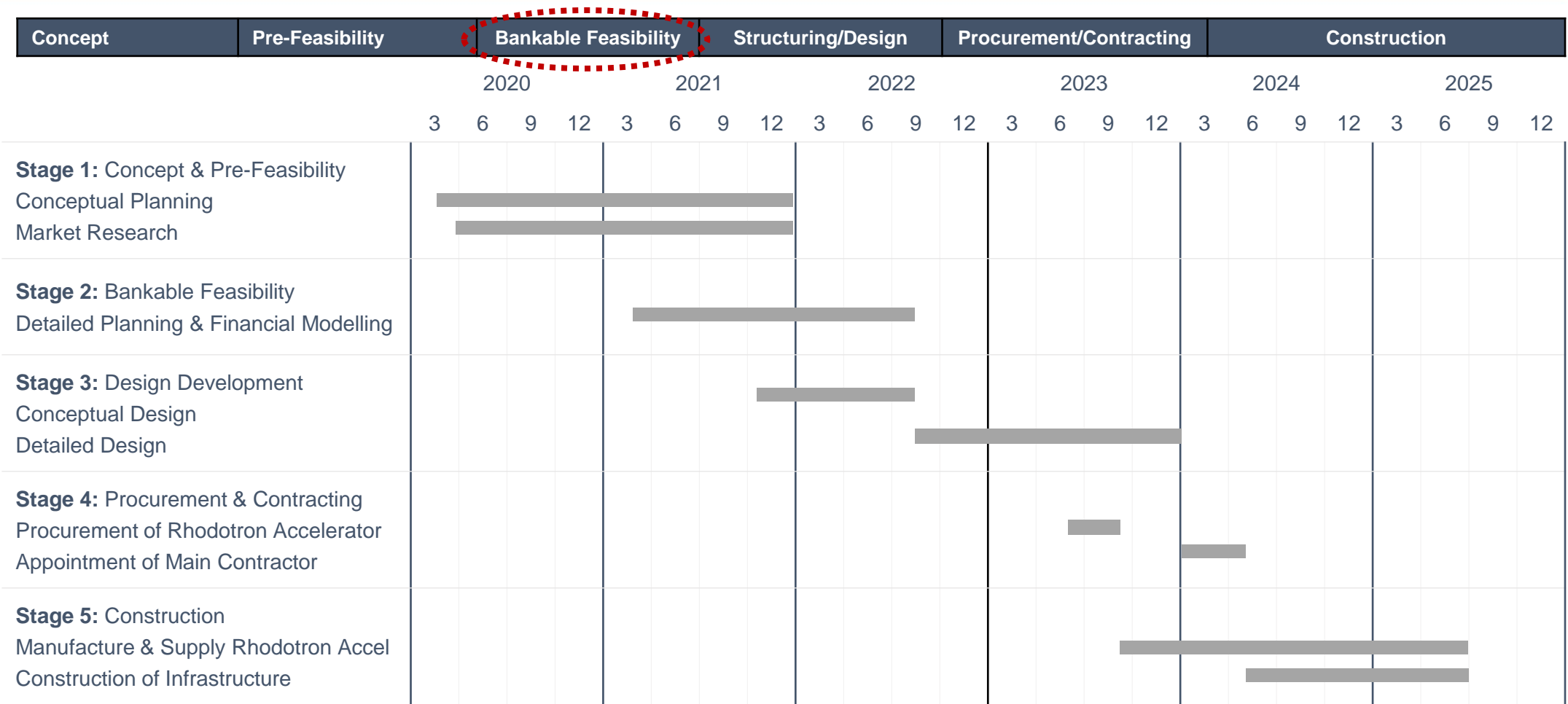
PROJECT IMPLEMENTATION MILESTONES – PHASE 1



It is estimated that Financial Close will be reached in 2022/23



PROJECT IMPLEMENTATION MILESTONES – PHASE 2



It is estimated that Financial Close will be reached in 2024/2025



THANK YOU
Q&A

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