

New Asset Success	Sydney Water	Hunter Water	Bluescope Steel	Snowy Hydro	Qantas	OneSteel (Worley)
What are the processes, Systems and stages involved in justifying new assets?	<ul style="list-style-type: none"> Identification of needs - Condition Assessment - Growth (EP) - Change in process/technology - Customer Demand - Regulatory Requirement - Stakeholder needs - Environment Management - Options Study - Cost/Benefit analysis - Risk/Benefit assessment/Studies 	<ul style="list-style-type: none"> Depends on Type. Can be to: - Cater for Growth (Must do, no other justification necessary) - Regulatory Requirements (Must do, no other justification necessary) - Based on risk assessment and cost/benefit analysis (Risk vs NPV) 	<ul style="list-style-type: none"> Concept Paper - Idea - Needs - Basic KPI's - Safety & Environmental - Estimates - Identify Risks - Benefits - Concept design - Financial evaluation Present to Stakeholders 	<ul style="list-style-type: none"> Corporate Plan * Business Development * Facility Plan - Asset Strategy - 20 year Asset Plan - Projects Program Feasibility * Studies * Risk Assessment Business Case 	<ul style="list-style-type: none"> - Need, Base Case, Risk Assessment/ OH&S - Pre Purchasing check list - Fit for purpose - Compliance - Standardisation - Feasibility Study - Utilisation-Other unit type available within QF - LCC - ROI - Stakeholder Engagement 	<ul style="list-style-type: none"> - User Requirement Spec - Scope of Project Phases * Assess * Select * Define * Execute * Operate
What are the criteria or considerations that have to be assessed before a project is approved?	<ul style="list-style-type: none"> - Return on Investment - Best option to meet functional/ operational requirement - REF and Environmental Impact Studies - Cost benefit analysis of various options (Value Management Study) 	<ul style="list-style-type: none"> -NPV (Capital, Op & Maint cost, etc) -Technical merit -Environmental Impact -Regulatory requirements -Safety requirements 	<ul style="list-style-type: none"> -Cost Benefits -Safety/ Environmental Impacts -Risk Study -Timeline -\$ Cost - Capital Required -NPV -Peer Reviews 	<ul style="list-style-type: none"> - NPV, IRR - Risks - Resources - Regulatory/ Statutory - Strategic Fit 	<ul style="list-style-type: none"> - 8 Blocker Assessment - Ensure checklist is complete - Meets Fit for Purpose & Functionality - Lead time - Financial Models - LCC, ROI, RFI, RFP - Risk Assessment 1st stage sign off - Selection process with stakeholders - P/O Number to select supplier 	<ul style="list-style-type: none"> - RFI - Timeline - Safety - Benefits
How are operations and maintenance involved in capital projects?	<ul style="list-style-type: none"> -Review of needs -Review of concepts -Finalise preferred option -Detailed design spec review -Adopting standards and procedures/ asset selection to meet required RAM -Asset commissioning/ maint planning/ training 	<ul style="list-style-type: none"> -Participation in planning workshops -Representative to involve maintenance personnel -Review/ comment on design reports/ specifications -Supposed to have representation at commissioning 	<ul style="list-style-type: none"> * CRS - Customer Requirement Specification * Client Rep/ Manager * MTEC Process Design Review's - HAZOPS, CHAZOPS, FAT * Operational Philosophy Document 	<ul style="list-style-type: none"> - URS - FAT - Design Studies - HAZOP - Risk Review - Implementation - Commissioning - Training 	<ul style="list-style-type: none"> - Review of Product Type - Stake Holder Engagement Process - Op's raise spec & Maintenance Review - Training Part of 8 Blocker - Risk Assessment Review 	<ul style="list-style-type: none"> - Included in URS, Scope & Define Phases - Project Owner + Represent. + Maint + Electrical Represent.
What type of analysis is used to determine maintenance plans (FMECA/RCM etc) and who is involved?	<ul style="list-style-type: none"> -RCM/FMECA -Input from equip Supplier/ O&M Maintenance manuals -Past experience - Data Analysis -Involvement: Ops & Maintenance 	<ul style="list-style-type: none"> -Suppliers manuals -Maint personnel review maint schedules -Based on schedules of existing similar equipment & previous experience -No formal RCM process 	<ul style="list-style-type: none"> MTEC - RCM etc 	<ul style="list-style-type: none"> - RCM, FMECA - OEM's, Maint Staff, Ops Staff - Strategy Engineers - Reliability Team 	<ul style="list-style-type: none"> - Supplier Documentation - Reg's - Aust Standards - Maint Review Task Card & advise on any amendments 	
How is the details of new assets specified?	<ul style="list-style-type: none"> -Through specifications, drawings Performance Data -Maintenance analysis data Reliability Standards -Total LCC 	<ul style="list-style-type: none"> Detailed specification document -Performance (functional) materials -Protective coatings etc -Based on design manuals & standard specs & approved products 	<ul style="list-style-type: none"> -Functional Requirement Specs -CRS, URS -CODES -Tender Documents -Procedures & Standards 	<ul style="list-style-type: none"> - URS - Standards (Aust, Elect, SHL) - Performance Standards 	<ul style="list-style-type: none"> - RFI - Develops Specification - RFP - Response from supplier to meet specification 	<ul style="list-style-type: none"> - URS - AS Codes - Site Standards