

A Strategic Plan for Building a Nuclear Power Plant in Chile in 2020

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Outline of Strategic Plan:

1. Period 1: Study and Debate
2. Period 2: Institution Building
3. Period 3: Construction Preparation
4. Period 4: Construction
5. Period 5: Operation (Evaluation of 2nd unit)

Period 1: 4 Years of Study and Debate

Gov	Pass Enabling Licensing Legislation
Gov	Increase participation in International Organizations
Gov	Review Nuclear Waste Policies
Gov	Debate Carbon Control Policies

Corp	Determine Site Selection Criteria
Corp	Determine Technology/Fuel Selection Criteria
Corp	Review Bid Evaluation Techniques
Corp	Identify Local Content Suppliers
Corp	Evaluate Economies of Remaining Stages
Corp	Identify Financial Risks and Uncertainties

NGO	Assess Public Consensus on Nuclear Power
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IAEA on the Regulatory Authority:

International Atomic Energy Agency, Choosing the Nuclear Power Option: Factors to be Considered (Vienna, 1998, p. 33):

“The regulatory authority must be strictly independent of the operating organization and must have the legal power to do the following:

- To formulate the rules and regulations which the owner/operator must follow;

- To issue licenses or permits for siting, construction, commissioning, operation, and decommissioning of nuclear power plants;

- To apply surveillance measures to ensure that the rules and regulations are followed by the owner/operator;

- To ensure that the licensee understands its obligations and is competent to fulfill them;

- To exercise law enforcement measures.”

Period 2: 4 Years of Institution Building

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| Gov | Create Regulatory Institutions and Start Training |
| Gov | Increase participation in International Organizations |
| Gov | Pass (Low Level) Nuclear Waste Legislation |
| Gov | Determine Carbon Control Strategy |
| Corp | Select Site(s) and Characterize |
| Corp | Select Technology, Fuel, and Architect/Engineer |
| Corp | Request and Evaluate Bids |
| Corp | Develop Local Content Suppliers |
| Corp | Evaluate Economies of Remaining Stages |
| Corp | Determine When Uncertainties Might be Resolved |
| NGO | Assess Public Consensus on Nuclear Power |

Period 3: 4 Years of Building Preparation

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| Gov | License Site, Suppliers, and Technology |
| Gov | Maintain participation in International Organizations |
| Gov | Pass (High Level) Nuclear Waste Legislation |
| Gov | Implement Carbon Control Strategy |
| Corp | Prepare site |
| Corp | Select General Construction Manager |
| Corp | Arrange Construction Financing and Refinancing |
| Corp | Upgrade Local Content Suppliers |
| Corp | Evaluate Profitability of Plant Construction |
| Corp | Determine Risk Management Strategy |
| NGO | Assess Public Consensus on Nuclear Power |

Period 4: 5 Years of Construction

Gov	Oversee Site, Suppliers, and Technology
Gov	Maintain participation in International Organizations
Gov	Build /upgrade low-level radioactive waste storage
Gov	Negotiate International Carbon Credits
Corp	Build First Nuclear Power Plant
Corp	Negotiate Purchase Power Agreements
Corp	Secure Financing and Refinancing
Corp	Upgrade Local Content Suppliers
Corp	Evaluate Economics of a Second Unit
Corp	Implement Risk Management Strategy
NGO	Assess Public Consensus on Nuclear Power

Period 5: 5 Years of Operation

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| Gov | Oversee Operations |
| Gov | Maintain participation in International Organizations |
| Gov | Build on-site (off-site) Spent Fuel Storage |
| Gov | Negotiate International Carbon Credits |
| Corp | Operate First Nuclear Power Plant |
| Corp | Deliver on Purchase Power Agreements |
| Corp | Secure Refinancing |
| Corp | Maintain Local Content Suppliers |
| Corp | Evaluate profitability of a Second Unit (order) |
| Corp | Upgrade Risk Management Strategy |
| NGO | Assess Public Consensus on Nuclear Power |