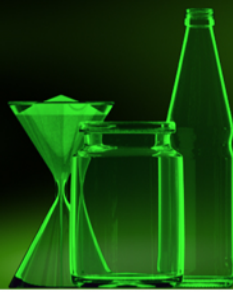


# SOLUTIONS



## Plant Concept Development

### APEGG's Expertise Includes

Building a new glass plant is an exciting prospect, but one which has a number of challenges to overcome.

APEGG advises investors who have a desire or requirement to build a new glass manufacturing plant or to extend an existing facility. Using an established framework, APEGG can react quickly and provide the customer with an initial concept plan.

With the new plant concept plan in hand, detailed engineering drawings (civil, structural, electrical etc.) can be made. Budget costs can be established, providing a comprehensive basis for financing.

APEGG has a good working relationship with the world's leading machine and equipment manufacturers. However, it is important to note that APEGG has no commercial agreements with any suppliers and will recommend equipment best suited for the purpose intended.

**Specification:** There are two basic construction methods for glass container plants that will be discussed during this phase. After discussion with the client to ascertain the most suitable construction, APEGG provides complete factory layouts for the concept from batch house to warehouse.

**Technical Specification:** Machine and equipment specifications can be provided to allow the customer to go out for tender. A full list of suitable suppliers can be supplied if required. Alternatively, APEGG can provide the specification and provide budget prices from a selection of reputable suppliers.

**Building Specification:** A detailed building specification and full utility requirements will be specified, taking into consideration local regulations and available utilities. This information allows the customer to agree the building plan with an architect and local authorities and discuss the utility requirements with local providers.

**Glass Composition:** The glass composition is important for the operation of the glass plant. Several parameters must be considered when setting out the glass composition. APEGG guides the customer in finding the best suitable glass composition. This is considering the availability of raw materials following a strict specification.

**Manning Level:** It is important to understand the manning level and the structure of the organisation from the outset, as it helps the recruitment process. APEGG assists the customer in building the right organisational framework and determining the number of people and skills required.

**Production Plan:** An annualised production plan is key to establishing operational costs. Knowing the production portfolio from the beginning is useful when selecting the right machines and accessories, and when estimating the required consumables. Loading the machines in an effective manner will maximise the return of investment.

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