

Interview with Chris Scheerder & Jack Beks

Brownfield Projects



How to Avoid Surprises and Deliver Your Brownfield Project Successfully

Effectively managing time, budget, and resources has always been a top priority of constructing power generation projects. Both in new construction or an upgrade or retrofit project owners hope to see completion safely, without exceeding schedule or budget. However there are subtle differences and challenges between managing Greenfield or Brownfield projects.

RWE Technology International has recently executed a brownfield project to convert the Amercentrale plant in the Netherlands from coal to 80% biomass with plans to end up 100% biomass firing. As project manager with more than 30 years industry experience, Jack Beks will share tips, tools and techniques that will help you work in this dynamic, operations-centric project environment. Amercentrale's director, Chris Scheerder, shares his view on the specific challenges from the perspective of the plant operator.

What specific considerations did you have to keep in mind while executing the project?

Jack: For me two main topics come to mind. First have a mutual objective between the owner Amer cluster and the ABC project team for RWE Generation is to get the project as soon as possible in the hot commissioning phase. This also is supportive to the renewable target for our country the Netherlands as whole. Secondly the cooperation between the temporary project organization and the normal Operational and Engineering & Maintenance staff of Amer.

Chris: Above all, safety is my key priority. And especially in brown field projects, where construction activities take place in a fully operational plant, you cannot ringfence the project activities, so the work is more complicated and requires more planning and discipline, from both sides.

Competing priorities are a nightmare of both project execution managers and plant directors in brownfield jobs. What's your advice to deal with them successfully?

Jack: The communication needs to be close and without hidden agendas. In this specific case it was definitely an advantage we had worked together already before. In the decisions to be made, the Total Cost of Ownership are leading, not only the project scope. If opportunities occur which have a business case on its own, flexibility is required from both sides to achieve the optimal result.

Chris: First of all the focus should be aimed at the long term company interest, and aligning Project and Operations targets. Of course you will sometimes see some tensions when there are some conflicts of interest, e.g. when necessary stops have to be planned/shifted, while market situations are unfavorable. The only way to solve this is full transparency, and act rationally, and compensate contractors for inconvenience and or liquidated damages.

When it comes to brownfield project challenges, you'll never be able to eliminate surprises. But how can you minimize them?

Jack: As RWETI is part of the RWE Group, a lot of experience of our staff is based on working within our own power plants. This gives one a good position to have a feeling of possible changes in the plants during the lifetime. Having a fully Integrated project team in which the majority of members are originating from the Amer location, from the Technical Support department or directly from Amer Operational or Engineering & Maintenance staff, helps to eliminate any surprises. Since this provides the team with the ability to have the latest info on the modifications of the plant to be able to manage the interfaces as good as possible.

Chris: Indeed, also at the Amer power station some assumptions proved to be not correct/too optimistic. Also the permitting process was frustrated by the unexpected political 'Nitrogenoxide' crisis, impacting the construction projects on a national scale. Being resourceful in limiting the impact is the thing to do, and not get into a blame-atmosphere. This only works if there is mutual trust and respect, accepting errors being made and work on solutions to mitigate impact. The mixed composition of the project team surely helped in avoiding an 'us and them' attitude.

How did you „sell“ the project to potential „users“ and prevent possible obstacles and difficulties in later, implementing stages?

Jack:

- Impact on actual and future operations needs to be reviewed and aligned as early as possible.
- Advantage of brown field project: customer involvement is high starting day one, use customer processes to implement our parts into the Amer power plant.
- Preparation of organization for plant installation. In-time information is key.
- Process operator and other performers (maintenance department etc.) need to be well-educated and trained due to 24 hour operation and maintenance.
- For future clients: Comforting to know that RWETI is willing to adapt the processes of future owners.

Chris: As said: the mixed team composition not only avoided an 'us and them' culture, but also avoided an opportunistic 'short term' focus, as the future user/client is part of the project team. This worked very well, and by doing so you also create a practically 'seamless' project handover.

Speed-to-market is a top priority for most customers. Any tips how to manage this specific obstacle?

Jack: Yes, that's a tricky issue. As project manager I often have to deal with aggressive schedules from the customers "go" to proceed until the commercial operations date. As RWETI we challenge the schedule milestones and try to find the optimal balance between progress, cost and risks. Sometimes this leads to disappointment since the customers thoughts may not fit to the realistic approach based on actual market information...However we prefer to define this upfront and the customer is able to select the best suitable plan instead of being surprised at a later phase of the project.

Chris: Open communication is key in this matter, as it is often a matter of speed vs. quality or additional costs. However compromises on safety are a **No Go!** In case of a delay, you have to jointly consider what options are available to mitigate or even gain back time. Obviously the extra costs for speeding up have to be outweighed by the gained extra revenues. In addition it is key to not focus on blaming but on finding solutions. This requires trust in each other's competencies and intentions. In RWETI I know I have a competent and transparent provider.