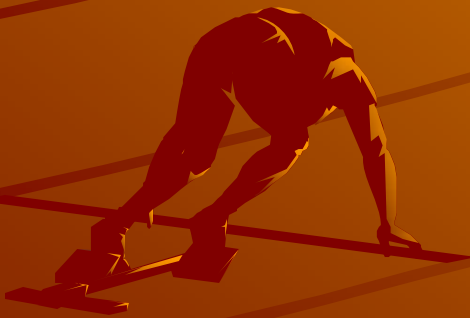


Potential Biofuels Project Pitfalls

Southern Bioproducts And Renewable Energy Conference

by

**Pete Moss
FBA Consulting
Memphis, TN**



**April 17, 2007
www.frazierbarnes.com**

FBA Consulting

- **Technical and Marketing Consulting Firm Established in 1996**
- **Headquartered in Memphis, Tennessee**
- **Specializes in Value-Added Processing of Agricultural Based Feedstocks**
 - Biofuel Production (Ethanol and Biodiesel)
 - Fractionation
 - Oilseed Processing/Vegetable Oil Refining
 - Biomass to Energy
 - “Green” Electrical Power Production
- **Focuses on Project Development Services**
 - Feasibility Studies
 - Business Plan Development/Implementation
 - Process Technology Evaluation/Selection
 - Owners Representative Services
 - Training & Start-up Management

Potential Biofuels Pitfalls

10 Potential Pitfalls in Starting a New BioFuels Project

1. Lack of a clearly defined mission
2. Inadequate planning
3. Failure to use good advisors and consultants
4. Lack of member leadership
5. Lack of member communication
6. Inadequate management
7. Failure to identify and minimize risk
8. Overly optimistic assumptions
9. Not enough capital investment
10. Inadequate communications to all stakeholders

Plant Startup

How long will it take?

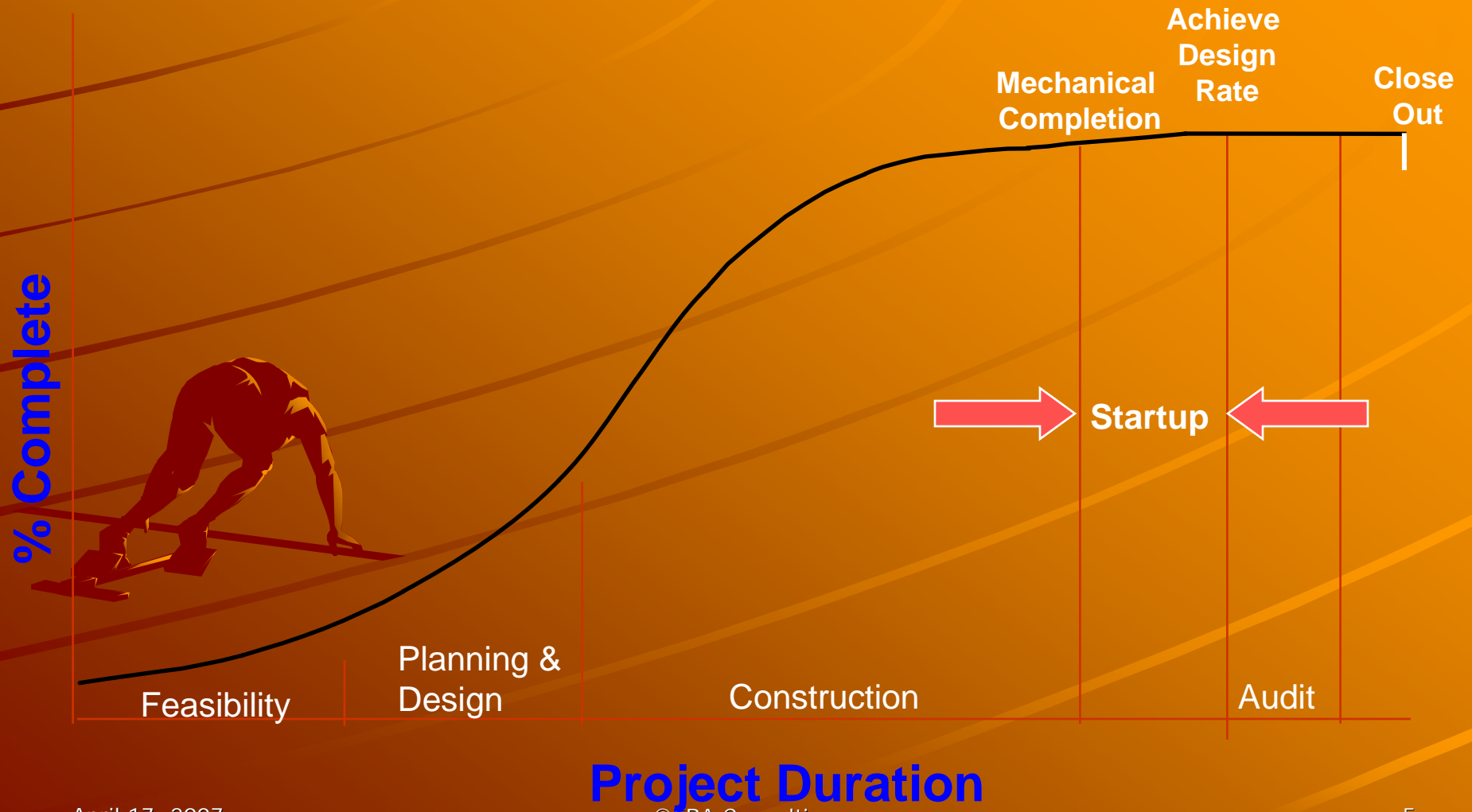
Longer than you would like.

How much will it cost?

More than you expect.



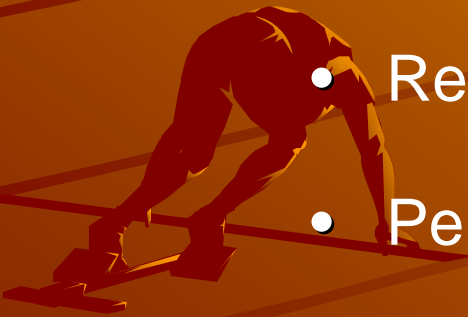
Typical Project Life Cycle



Plant Startup

What is at Stake?

- Profitability of the company?
- Success of the project?
- Reputation of the company?
- Personal Reputation?



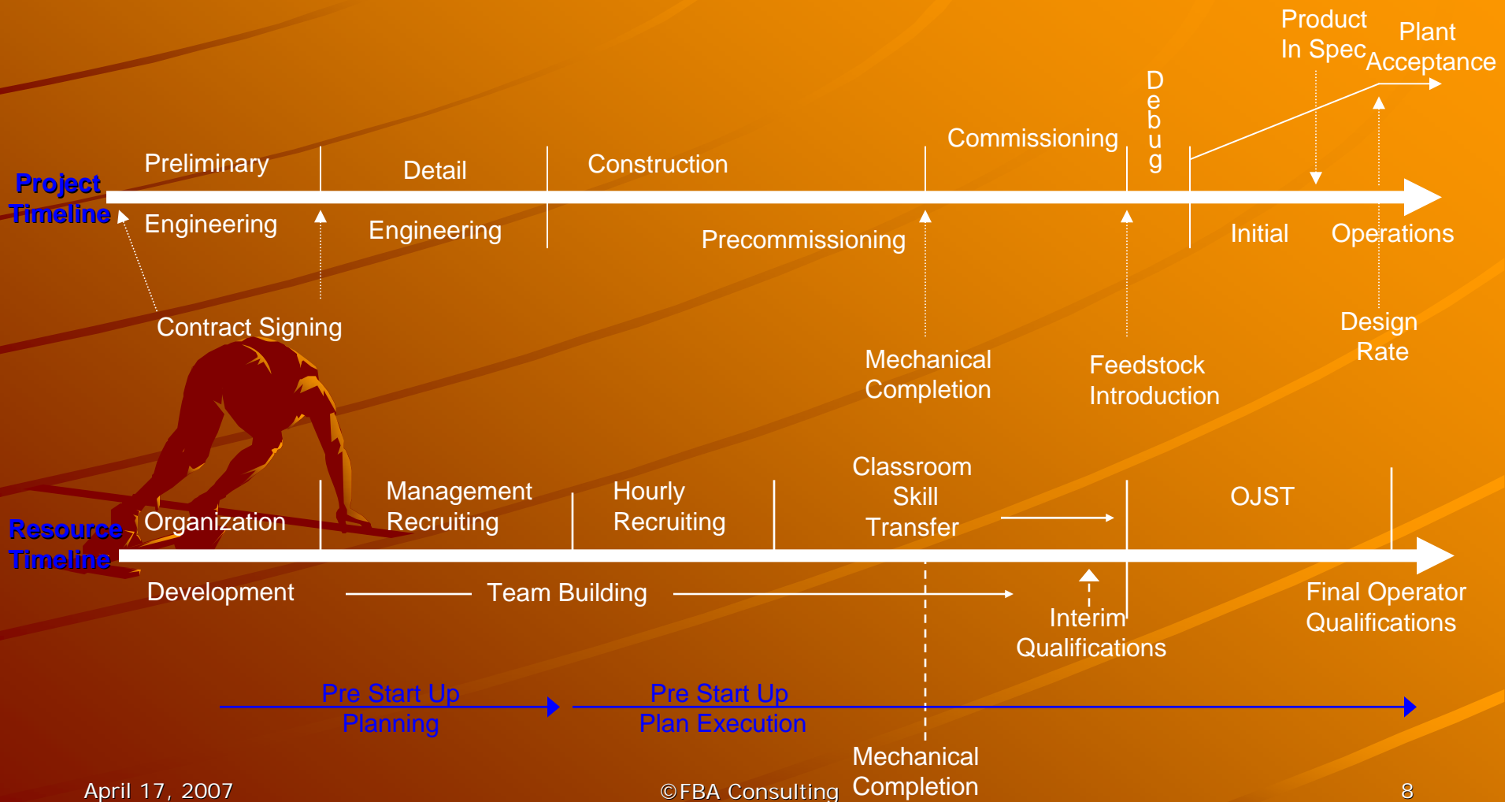
Startup Terminology

Pre-commissioning... the non-operating work responsibilities such as adjustments, cold alignment checks, etc. **Performed by the construction contractor** prior to commissioning or mechanical completion.

Mechanical Completion... occurs when the plant has been erected in accordance with drawings, specifications and applicable codes. Therefore pre-commissioning activities have been completed to the extent necessary to permit the owner to accept the plant and begin commissioning activities.

Commissioning... Activities associated with preparing or operating the plant or any part of the plant; prior to the initial startup and **are usually the owner's responsibilities.** Typically defined in contract.

Project Timelines



Start-up Duration - Degree of Difficulty

