

The Characteristics of Large Firms in ATP Projects*

The participation of large firms increases technology development opportunities across a broad spectrum of technology areas and industries.

In single-company projects:

Large firms represent a small percentage of all single company ATP projects, but their participation enables ATP to support industry needs across the full spectrum of technology areas

- 12 percent of all single company projects involve a large firm, but this varies across technology area. Of these projects,
 - 48 percent are in Materials and Chemistry
 - 13 percent are in Biotechnology
 - 11 percent are in Electronics and Photonics
 - 13 percent are in Manufacturing
 - 15 percent are in Information Technology
 - ✓ Projects in Materials and Chemistry, in particular, often require extensive manufacturing and materials processing facilities that small firms do not have.

- 88 percent of all single company projects involve a small or medium-sized firm. Of these,
 - 30 percent are in Biotechnology
 - 25 percent are in Information Technology
 - 18 percent are in Materials and Chemistry
 - 17 percent are in Electronics and Photonics
 - 9 percent are in Manufacturing

In joint-venture projects:

Large firms are active in joint ventures

- About three out of four ATP joint venture projects involve a large firm
 - 94 percent of joint ventures in Manufacturing include a large firm
 - 84 percent of joint ventures in Materials and Chemistry include a large firm

Large firms are more active in a leading role in some technology areas

- Approximately one out of three ATP joint venture projects are led by a large firm
 - 49 percent of joint ventures in Materials and Chemistry are led by a large firm
 - 43 percent of joint ventures in Information Technology are led by a large firm
 - 32 percent of joint ventures in Electronics and Photonics are led by a large firm

Large firms in joint ventures partner with all types of organizations

- 87 percent of joint venture projects involving a large firm also include a smaller company.
- 38 percent of joint venture projects involving a large firm also include a university, government laboratory, or other not-for-profit organization.

Large firms offer critical advantages in certain industries and technology areas

- Large firms bring technical advantages related to size and scope and commercialization advantages through marketing and manufacturing capability.
 - Large firms gain access to new technologies while small firms find opportunities to integrate their technologies into larger systems and build a customer base.

*(*This study examined 688 active or completed ATP projects funded 1990 through September 2004.)*