

3.9 DENMARK

Denmark with a population of 5.1 million and a GDP of \$693 billion DKR (198+) (C\$ = 5.7 DKR) has broadened its economic base from agricultural products and beers to include machinery, electronics, textiles and pharmaceuticals. ● ●

In the period 1982-86, industrial investment increased 79 %, industrial employment was up 13 %, and industrial exports increased 41%. Denmark spends approximately 1.4% of GDP on R&D.

TECHNOLOGY STRENGTHS

Key technology areas listed below include companies which are highly recognized internationally.

- A) Agriculture and food technology
Companies: Danisco, MD Foods, Tulip, Meat Research Inst.
- B) Biotechnology (Particularly within agri-food sector)
Companies: Carlsberg, Novo-Nordisk, Chr. Hansen Lab., Danisco, Dakopatts
- C) Medical products/Pharmaceuticals
Companies: Novo-Nordisk, DAK, Loeven, Lundbeck, Ferrosan
- D) Health care products/Handicap aids
Companies: Coloplast, Ambu, Danish Health Care Systems
- E) Electronics/Medical electronics (Often niche-oriented and based on advanced transducer technology)
Companies: Radiometer, Bruel & Kjaer, Oticon, Widex, Simonsen & Weel, Foss Electric
- F) Ships and harbours
Companies: Maersk, Cowi, Carlk Bro, Ramboll & Hannemann, Danish Hydraulic Inst., Welding Inst.
- G) Process regulation
Companies: Danfoss, S.T. Lyngsoe
- H) Energy technology
Companies: I. Druger, Cowi, Haldor Topsoe
- I) Waste management technology including hazardous waste
Companies: Kommune Kemi, Chemcontrol
- J) Agriculture machinery
Companies: Dania, Taarup
- K) Cement industry and machinery (Turn-key installations)
Company: F.L. Smith recognized world leader

KEY ORGANIZATIONS

These include:

- *National Agency of Industry and Trade*
Responsible for administration of national technology-related schemes and programs, regional development programs, export development programs and trade regulations.
- *Academy of Technical Sciences*
Established 1937 as an independent institution to promote technical and scientific research for the benefit of trade and industry. Among the 20 non-profit institutes affiliated to the Academy are Danish Research Centre for Applied Electronics, Danish Welding Institute, Danish Institute of Biomedical Engineering and Danish Hydraulic Institute.
- *Risoe National Laboratory*
Largest national research institute in Denmark. Has high international representation among researchers. Priority areas: applied and basic research within energy, materials science, chemistry, biology.