

AKSA AKRILIK KIMYA SANAYI



19 January 2011, Istanbul





AKKOK INDUSTRIAL INVESTMENT &DEVELOPMENT INC,

AKKOK GROUP COMPANIES AIM TO BECOME A WORLD-CLASS ORGANIZATION



MORE THAN
40 INDUSTRIAL
AND COMMERCIAL
COMPANIES

Main Sectors

- *****CHEMICALS
- ***** ENERGY
- **❖** REAL ESTATE DEVELOPMENT
- **TEXTILES**
- **❖ PORT MANAGEMENT**
- * MARKETING & SALES INSURANCE

AKKOK Companies Quoted at the Istanbul Stock Exchange

| DUCER |
|---|
| OF THE MARKET LEADERS WITH ITS DUCTION OF PRIVATE GENERATION DISTRIBUTION COMPANIES |
| ADING INDUSTRIAL CORPORATION DUCING FABRIC & YARN |
| ESTATE INVESTMENT COMPANY : LD BRAND AS A SHOPPING CENTER |
| |

WORLD'S LARGEST ACRYLIC FIRED





AKKOK INDUSTRIAL INVESTMENT & DEVELOPMENT INC,

ESTABLISHED A STABLE GROWTH SINCE 1952

COMBINED SALES OF US\$2,2 BILLION IN 2009

EXPORTS OF US\$332 MILLION IN 2009

US\$1,2 BILLION OF INVESTMENT IN 2006 - 2009

PLANS US\$700 MILLION OF CAPEX FOR 2010

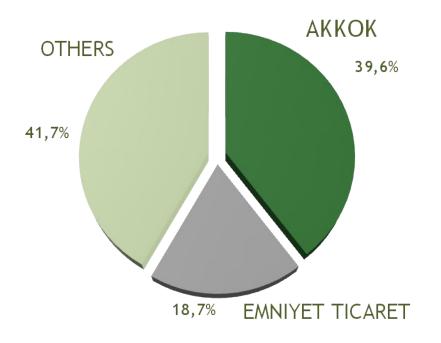
EMPLOYS AROUND 4,000 PEOPLE





AKSA ACRYLIC SHAREHOLDER STRUCTURE

SHAREHOLDERS



EQUITY PARTICIPATIONS

| COMPANY TITLE | % |
|---------------|-------|
| AK-PA | 13,5 |
| FITCO B.V | 100,0 |
| AK-TOPS | 60,0 |
| AV CIDICIM | 50 A |
| AIT OITISIM | 55,0 |
| | · |

Free float: 38%





STRATEGIC BUSINESS UNITS of AKSA ACRYLIC



STANDARD ACRYLIC FIBER BUSINESS UNIT

- Largest acrylic fiber producer under one single roof in the world;
- 12,5% global market share;
- Turkey's sole local producer having 66% local market share.



TECHNICAL FIBERS BUSINESS UNIT

- High value-added products;
- Develop fibers for technical end-use areas;
- Targeting increase the share of technical fibers in our sales. (2015:10%)



CARBON FIBER BUSINESS UNIT

- Commissioning of the 1500 tpa production line in Q3 2009;
- Targeting industrial applications such as wind turbines, automative, pressurised vessels, construction;
- New investment for the 2nd production line for the CF Capacity: 1700 tpa)
- Targeting 10% market share by 2020.



ENERGY BUSINESS UNIT

- Acquired 70 Mwe capacity Natural Gas power plant from Akenerji;
- Currently investing in 100 Mwe capacity dual gas power generation plant;
- Commissioning of the plant will be by May 2011.





ACRYLIC FIBER BUSINESS UNIT





HAVING 42 YEARS OF EXPERIENCE IN ACRYLIC FIBER INDUSTRY,,,

- Leader in Turkey and in international markets in terms of capacity, size, pre-and post-service quality, product diversity & flexibility;
- Low cost leader;
- Production capacity: 308,000 ton/year;
- Capacity Utilization Rate: 85% in 2009, 82% in Q32010.

SUCCESS THAT COMES FROM A DIVERSITY OF PRODUCTS,,,



Major Acrylic Fiber Uses;

Apparel

Home Textiles & Furnishings

Industrial Uses







AKSA ACRYLIC FIBER PRODUCTION

Annual production growth rate 10,3%



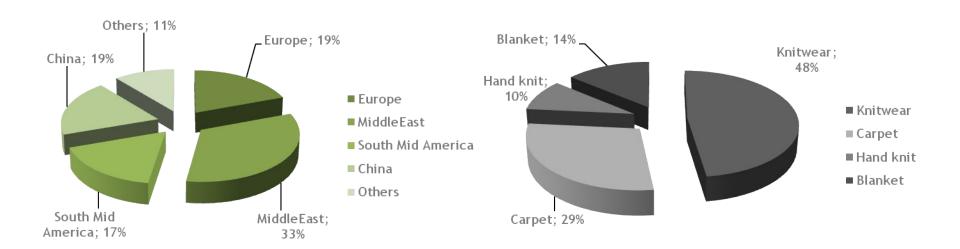




2010 /SALES BREAKDOWN OF AKSA AKRILIK

DOMESTIC SALES BREAKDOWN

EXPORT SALES BREAKDOWN



Share of technical fibers and special fibers within total exports has increased from 10% to 18% in 2010



AKSA

ACRYLIC FIBER SECTOR IN BRIEF



- Acrylic fiber market accounts for 2 million tonnes in 2010,
- **Biggest Consumption Markets** China 875,000 tonnes - 44% of world Turkey 265,000 tonnes - 13% of world Iran 130,000 tonnes - 6,5% of world India 110,000 tonnes - 5% of world Egypt 33,000 tonnes - Syria 27,000 tonnes



- China adopts self sufficiency strategy, Shuts down idle facilities and invests on new capacity no more. During 2007-2010 China market shrank by 20%.
- Sector has 20% idle capacity. Europe accounts for excess capacity. Far East balanced capacity and demand. Shut downs (Europe, USA, Far East...) and consolidations
 - have taken place for last 10 years.





ACRYLIC FIBER INDUSTRY PLAYERS

- · AKSA
- MONTEFIBRE (SPAIN)
- DRALON (GERMANY)
- FISIPE (PORTUGAL)
- BIRLA (THAILAND & EGYPT)
- JILIN (CHINA)
- SHANGHAI PETROCHEMICALS (CHINA)

Jilin and MonteFibre founded JiMont by forming an alliance, Jilin Qifeng and Jimont, 2 factories, have a cumulative production capacity of 240,000 tonnes.

- In 2009, MonteFibre shut down the last facility in Italy, They only produce 90,000 tonnes in Spain.
- Birla increased production capacity at Egypt, from 18,000 tonnes to 35,000 tonnes in 2010, and possible to reach 60,000 tonnes, Facility at Thailand has 90,000 tonnes of capacity.
 - Although Jilin and SPC (China) are big firms, they are not direct competitors to AKSA.





THREAT OF SUBSTITUTES

| GLOBAL PRODUCTION OF TEXTILE FIBERS (1000 TONNES) | | | | | | | | | | | | |
|---|---|---|---|--|--|--|---|---|---|---|--|--|
| 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | AGR | | |
| | | | | | | | | | | | | |
| 32,101 | 31,686 | 33,907 | 35,511 | <i>37</i> ,953 | 38,165 | 41,277 | 44,523 | 42,640 | 44,600 | 3,70% | | |
| 19,073 | 19,244 | 20,956 | 22,258 | 24,406 | 24,701 | 27,808 | 31,094 | 30,650 | 32,400 | 6,10% | | |
| 5,984 | 5,815 | 5,913 | 6,159 | 6,303 | 6,463 | 6,473 | 6,444 | 5,940 | 6,100 | 0,20% | | |
| 4,063 | 3,745 | 3,947 | 3,992 | 4,017 | 3,865 | 3,883 | 3,895 | 3,510 | 3,480 | -1,70% | | |
| 2,669 | 2,555 | 2,742 | 2,678 | 2,743 | 2,632 | 2,535 | 2,446 | 1,930 | 2,020 | -3,00% | | |
| 312 | 327 | 349 | 424 | 484 | 504 | 578 | 644 | 610 | 600 | 7,50% | | |
| | | | | | | | | | | | | |
| 2,755 | 2,692 | 2,715 | 2,855 | 3,096 | 3,138 | 3,296 | 3,592 | 3,235 | 2,950 | 0,80% | | |
| 19,749 | 19,814 | 20,623 | 20,120 | 21,974 | 24,398 | 25,707 | 26,704 | 24,450 | 22,300 | 1,40% | | |
| 1,250 | 1,180 | 1,357 | 1,274 | 1,219 | 1,231 | 1,227 | 1,218 | 1,210 | 1,190 | -0,50% | | |
| 4,015 | 3,065 | 3,222 | 3,232 | 3,179 | 3,250 | 3,200 | 3,200 | 3,300 | 3,240 | -2,40% | | |
| 463 | 588 | 721 | 773 | <i>7</i> 51 | <i>7</i> 92 | 770 | 780 | 800 | 820 | 6,60% | | |
| 130 | 179 | 201 | 269 | 269 | 250 | 250 | 250 | 250 | 250 | 7,50% | | |
| 86 | 82 | 92 | 97 | 115 | 133 | 145 | 156 | 150 | 150 | 6,40% | | |
| | | | | | | | | | | | | |
| 60,549 | 59,286 | 62,838 | 64,131 | 68,556 | 71,357 | 75,872 | 80,423 | 76,035 | 75,500 | 2,50% | | |
| | | | | | | | | | | | | |
| 4,40% | 4,30% | 4,40% | 4,20% | 4,00% | 3,70% | 3,30% | 3,00% | 2,50% | 2,70% | | | |
| 8.30% | 8.10% | 8.10% | 7.50% | 7.20% | 6.90% | 6.10% | 5.50% | 4.50% | 4.50% | | | |
| | 2000 32,101 19,073 5,984 4,063 2,669 312 2,755 19,749 1,250 4,015 463 130 86 60,549 | 2000 2001 32,101 31,686 19,073 19,244 5,984 5,815 4,063 3,745 2,669 2,555 312 327 2,755 2,692 19,749 19,814 1,250 1,180 4,015 3,065 463 588 130 179 86 82 60,549 59,286 4,40% 4,30% | 2000 2001 2002 32,101 31,686 33,907 19,073 19,244 20,956 5,984 5,815 5,913 4,063 3,745 3,947 2,669 2,555 2,742 312 327 349 2,755 2,692 2,715 19,749 19,814 20,623 1,250 1,180 1,357 4,015 3,065 3,222 463 588 721 130 179 201 86 82 92 60,549 59,286 62,838 4,40% 4,30% 4,40% | 2000 2001 2002 2003 32,101 31,686 33,907 35,511 19,073 19,244 20,956 22,258 5,984 5,815 5,913 6,159 4,063 3,745 3,947 3,992 2,669 2,555 2,742 2,678 312 327 349 424 2,755 2,692 2,715 2,855 19,749 19,814 20,623 20,120 1,250 1,180 1,357 1,274 4,015 3,065 3,222 3,232 463 588 721 773 130 179 201 269 86 82 92 97 60,549 59,286 62,838 64,131 4,40% 4,30% 4,40% 4,20% | 2000 2001 2002 2003 2004 32,101 31,686 33,907 35,511 37,953 19,073 19,244 20,956 22,258 24,406 5,984 5,815 5,913 6,159 6,303 4,063 3,745 3,947 3,992 4,017 2,669 2,555 2,742 2,678 2,743 312 327 349 424 484 2,755 2,692 2,715 2,855 3,096 19,749 19,814 20,623 20,120 21,974 1,250 1,180 1,357 1,274 1,219 4,015 3,065 3,222 3,232 3,179 463 588 721 773 751 130 179 201 269 269 86 82 92 97 115 60,549 59,286 62,838 64,131 68,556 4,40% 4,30% 4,40% 4,20% 4,00% | 2000 2001 2002 2003 2004 2005 32,101 31,686 33,907 35,511 37,953 38,165 19,073 19,244 20,956 22,258 24,406 24,701 5,984 5,815 5,913 6,159 6,303 6,463 4,063 3,745 3,947 3,992 4,017 3,865 2,669 2,555 2,742 2,678 2,743 2,632 312 327 349 424 484 504 2,755 2,692 2,715 2,855 3,096 3,138 19,749 19,814 20,623 20,120 21,974 24,398 1,250 1,180 1,357 1,274 1,219 1,231 4,015 3,065 3,222 3,232 3,179 3,250 463 588 721 773 751 792 130 179 201 269 269 250 86 82 92 97 115 133 60,549 59, | 2000 2001 2002 2003 2004 2005 2006 32,101 31,686 33,907 35,511 37,953 38,165 41,277 19,073 19,244 20,956 22,258 24,406 24,701 27,808 5,984 5,815 5,913 6,159 6,303 6,463 6,473 4,063 3,745 3,947 3,992 4,017 3,865 3,883 2,669 2,555 2,742 2,678 2,743 2,632 2,535 312 327 349 424 484 504 578 2,755 2,692 2,715 2,855 3,096 3,138 3,296 19,749 19,814 20,623 20,120 21,974 24,398 25,707 1,250 1,180 1,357 1,274 1,219 1,231 1,227 4,015 3,065 3,222 3,232 3,179 3,250 3,200 463 588 7 | 2000 2001 2002 2003 2004 2005 2006 2007 32,101 31,686 33,907 35,511 37,953 38,165 41,277 44,523 19,073 19,244 20,956 22,258 24,406 24,701 27,808 31,094 5,984 5,815 5,913 6,159 6,303 6,463 6,473 6,444 4,063 3,745 3,947 3,992 4,017 3,865 3,883 3,895 2,669 2,555 2,742 2,678 2,743 2,632 2,535 2,446 312 327 349 424 484 504 578 644 2,755 2,692 2,715 2,855 3,096 3,138 3,296 3,592 19,749 19,814 20,623 20,120 21,974 24,398 25,707 26,704 1,250 1,180 1,357 1,274 1,219 1,231 1,227 1,218 | 2000 2001 2002 2003 2004 2005 2006 2007 2008 32,101 31,686 33,907 35,511 37,953 38,165 41,277 44,523 42,640 19,073 19,244 20,956 22,258 24,406 24,701 27,808 31,094 30,650 5,984 5,815 5,913 6,159 6,303 6,463 6,473 6,444 5,940 4,063 3,745 3,947 3,992 4,017 3,865 3,883 3,895 3,510 2,669 2,555 2,742 2,678 2,743 2,632 2,535 2,446 1,930 312 327 349 424 484 504 578 644 610 2,755 2,692 2,715 2,855 3,096 3,138 3,296 3,592 3,235 19,749 19,814 20,623 20,120 21,974 24,398 25,707 26,704 24,450 | 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 32,101 31,686 33,907 35,511 37,953 38,165 41,277 44,523 42,640 44,600 19,073 19,244 20,956 22,258 24,406 24,701 27,808 31,094 30,650 32,400 5,984 5,815 5,913 6,159 6,303 6,463 6,473 6,444 5,940 6,100 4,063 3,745 3,947 3,992 4,017 3,865 3,883 3,895 3,510 3,480 2,669 2,555 2,742 2,678 2,743 2,632 2,535 2,446 1,930 2,020 312 327 349 424 484 504 578 644 610 600 2,755 2,692 2,715 2,855 3,096 3,138 3,296 3,592 3,235 2,950 19,749 19,814 | | |

Substitutes compete with price differentiation, Preference of acrylic fiber is sustained until price difference is 0,50-0,70 US\$/kg.





COST STRUCTURE OF ACRLYIC FIBER

The key cost component is the raw material Acrylonitrile

- Acrlyonitrile prices fluctuates depending on the oil prices and the demand supply balance;
- Approximately 65% -70% of the production costs come from ACN;
- Currently ACN prices are around 2,300 US\$/ton
- 30% of ACN locally sourced from PETKIM, The rest is heavily imported from Europe .

The other important cost component is "The Energy",

- Continously improving energy specific consumption through investments;
- New power generation plant will decrease energy costs by 40%.

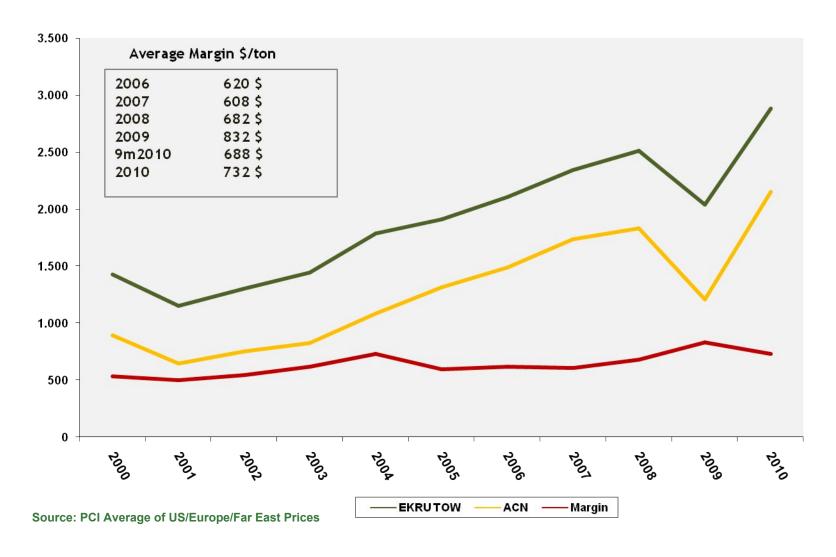
Labor Costs

- High rate of production per capita;
- Low labor rate compared to European competitors.





ECRU TOW - ACN PRICE MARGIN (US\$/ton)







CARBON FIBER BUSINESS UNIT

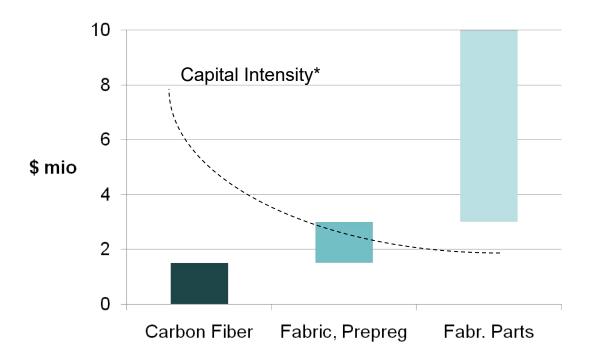






CARBON FIBER, COMPOSITE MATERIALS & COMPOSITES IS A \$10 BILLION INDUSTRY





Facilities Required: Precursor Facility Carbonization Facility Facilities Required: Weavers/Looms, Prepreg Lines

Facilities Required: Fabric Layup Curing Equipment





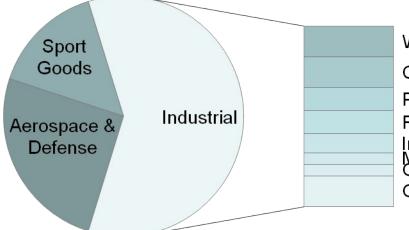
USES / CURRENT MARKET FOR CARBON FIBER



Current Demand for Carbon Fiber < 40.000mt p.a.; > US\$1B



Image of the new Airbus A350



Wind Blades
Compounding
Press vessels
Racing/Autos
Infrastructure
Marine
Oil&Gas
Other Industr



AKSA is targeting Industrial Applications



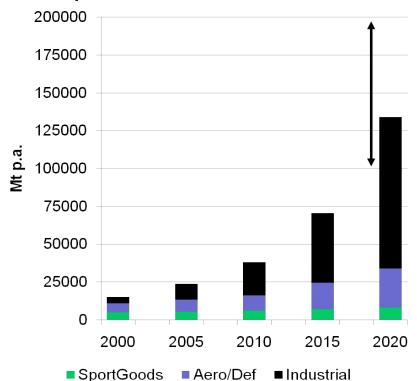




EXPECTED GROWTH IN DEMAND FOR CARBON FIBER



Expected Demand for Carbon Fiber



Sports Goods Aerospace Apps 2010 vs 2020: 2010 vs 2020: $7.000t \rightarrow$ $8,000t \rightarrow$ 10,000-15,000t

25,000-30,000t

Overall Demand for Carbon Fiber in 10 years is expected to be 3 to 6 times what it is today (100,000-200,000mt or more),

Industrial Applications are expected to make up the majority of future demand.

AKSA is targeting to supply industrial applications.



Industrial Apps 2010 vs 2020:

Wind: 5,000t → 15,000-50,000t

Compounding: 5,000t → 15,000-50,000t

Pressure Vessels: $3.000t \rightarrow$ 15,000-50,000t

Autos: $2,500t \rightarrow$ 20,000-100,000t

Infrastructure: 2,000t → 5,000-25,000t

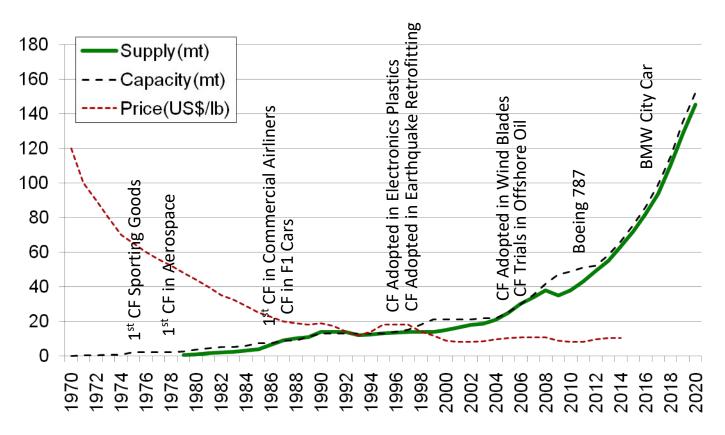
Others: 5,000t → 15,000-50,000t





GROWTH IN DEMAND FOR CARBON FIBER OVER 50 YEARS FROM 1970-2020







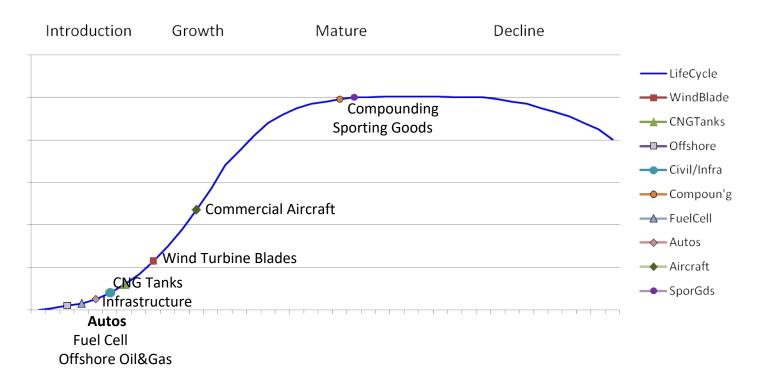




MOST APPLICATIONS OF CARBON FIBER ARE JUST BEGINNING ON THE PRODUCT LIFE CYCLE



Positioning of Products Made of CF



Source: CF Conf – Dec 2009 – Lucintel Presentation





MILESTONES FOR AKSACA





2006

• Investments began for the production of carbon fiber,

2008

 Aksa worked on laboratory-scale carbon fiber system precursor and carbon fiber development and experimentation,

 Installations and start-up for the pilot carbon fiber plant that will be working at a 34 ton/year capacity have been completed.



2009

 Commissioned its 1,500 tpa capacity carbon fiber production plant and realized the first commercial sale in Q4 2009.

• Total investment is US\$85 million, US\$50 million of which has been financed through long-term loan.

2010

• We have publicly announced the investment for the second line on Carbon Fiber. It is going to be a 1,700 tpa line and the planned capex is M'USD65. Also our existing line's nameplate capacity was 1,500 tpa and we are also going to de-bottleneck this line with a capex of M'USD7. This existing line will also reach the 1,800 tpa capacity when we complete the process.



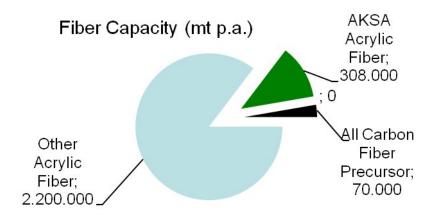


AKSA'S POTENTIAL STRENGTH IN CARBON FIBER



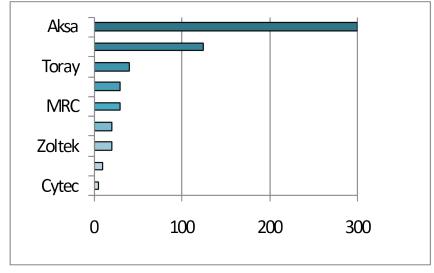


Having the world's largest capacity for acrylic fiber production under a single roof, AKSA's infrastructure is unmatched by any carbon fiber producer.



AKSA is uniquely positioned to offer high quality, reliably supplied, competitively priced carbon fiber.

Acrylic Fiber and Precursor Capacity of Carbon Fiber Producers (000mt)







COST STRUCTURE OF CARBON FIBER



- Capital Intensive Initial capital cost of a precursor and carbon fiber production facility is very high, depreciation is significant.
- Half of cost is linked to the price of oil Acrylonitrile and the energy to convert and process it into carbon fiber.
- AKSA's Advantages in Yalova;
 - Well facilitized and operated acrylic fiber factory,
 - Large scale facility (300,000t),
 - Technically oriented workforce,
 - > Low cost labor.





AKSA'S TARGET IN CARBON FIBER



- Entered the carbon fiber market with "standard grade" small-tow products;
- Targeting industrial applications where high quality, reliably supplied; competitively priced carbon fiber is wanted;
- Intending to further develop our portfolio of products over time;
- Support the increased use of carbon fiber based composites in Turkey;
- Aiming to achieve a strong position in carbon fiber as in acrylic fiber.





ENERGY BUSINESS UNIT





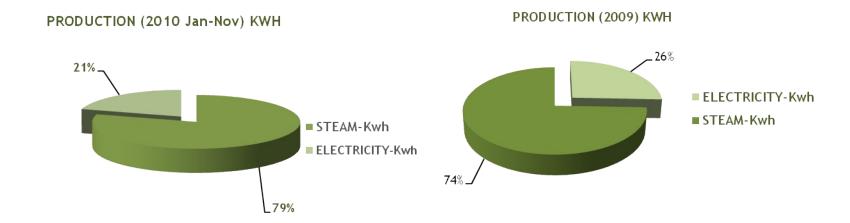
OUR ENERGY IS INCREASING...

- In 2008, in an effort to reduce energy costs and to increase competitive power, Aksa had been looking into alternative power production methods.
- Aksa acquired 70,04 MWe capacity power production plant from Akenerji.
- Aksa ventured out in the last quarter of the year with a new investment in this area, obtaining a license for 100 MWe capacity production facility running on a fuel system that uses alternative blends.
- Increased its total energy production capacity to 170 Mwe. The budget set aside for this investment is US\$135 million.
- Aksa has signed US\$100 Million long-term loan agreement for the project.
- The new power plant is expected to be commissioned by 2011. By this investment Aksa will save up to 40% on energy costs compared to year 2008.

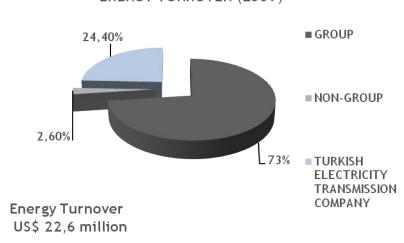




ENERGY PRODUCTION & TURNOVER



ENERGY TURNOVER (2010 Jan-Nov) **ENERGY TURNOVER (2009)** 2,1% 24,40% 18,5% **TURKISH ELECTRICITY** TRANSMISSION COMPANY ■ Group 2,60% ■ Non group 79,5% Energy Turnover





US\$ 31,2 million



LONG-TERM MAIN STRATEGIC GOALS (2015)

- Generate at least US\$1,1 billion sustainable revenue in its Strategic Business Areas,
- Achieve at least 15% EBITDA margin,
- Maintain capacity utilization in Acrylic Fiber Business and low-cost leadership through cost saving projects,
- Target 5% market share in Carbon Fiber in 5 years and 10% market share in 10 years,
- Generate US\$120-130 million turnover in Carbon Fiber Business Area in 5 years,
- Achieve at least 30-35% EBITDA margin in Carbon Fiber Business Area,
- Develop a downstream industry in Turkey for Carbon Fiber,
- Develop new technical fibers to create added value and end-use areas except textile industry.





2011 BUDGET FIGURES

Net Sales US\$ 930-960 million

AF US\$ 790-805

Technical Fibers US\$ 60-65

CF US\$ 25-28

Energy US\$ 55-62

Exports US\$ 350-375 million

AF CUR %85

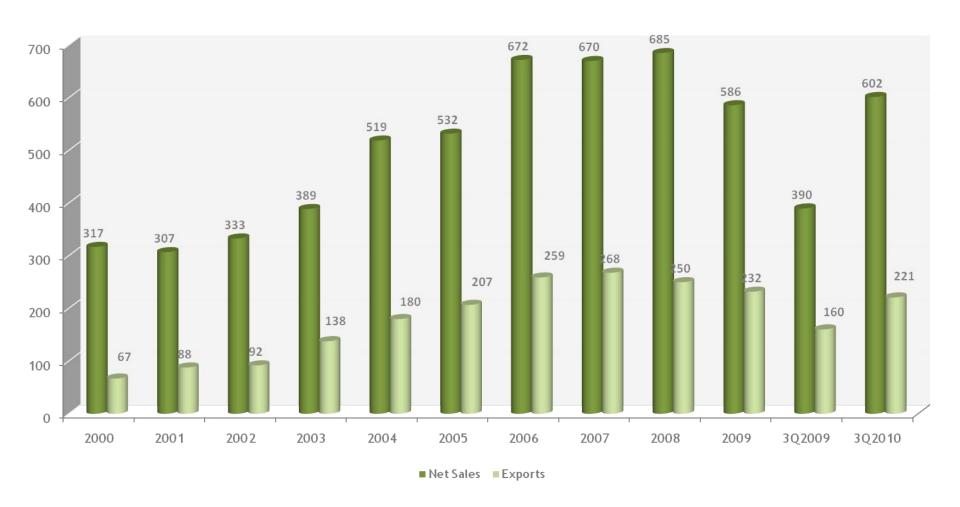
EBITDA margin 10%-11%

CAPEX US\$160-170 Million





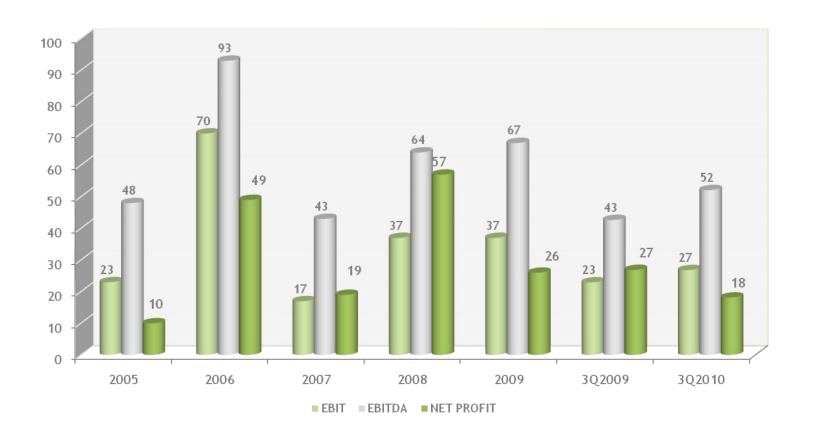
NET SALES & EXPORT (FOB) (US\$ million)







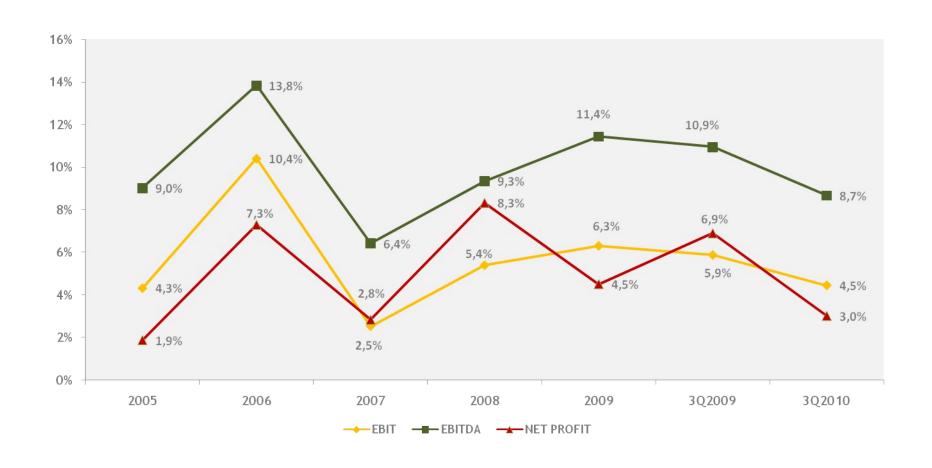
EBIT - EBITDA - NET PROFIT (US\$ million)







EBIT -EBITDA - NET PROFIT (%)







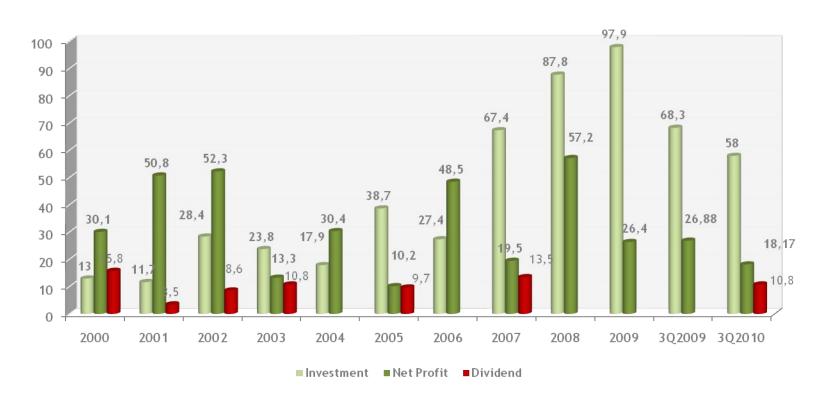
INVESTMENT-PROFIT-DIVIDEND

2000-2010/09:

Total Investment

Total Net Profit

US\$ 472,00 million US\$ 356,87 million US\$ 72,70 million **Total Dividend**









THANK YOU

YOU IMAGINE, WE PRODUCE

http://www,aksa,com http://www,aksaca,com,tr

