



AKSA AKRILIK KIMYA SANAYI



November 2012





AKKOK INDUSTRIAL INVESTMENT & DEVELOPMENT INC.

Akkok Group Companies

CHEMICALS

AKSA, AK-KİM, DOWAKSA

ENERGY

AKENERJİ, SEDAŞ, EGEMER

TEXTILES

AK-TOPS, AKSA EGYPT

REAL ESTATE DEVELOPMENT

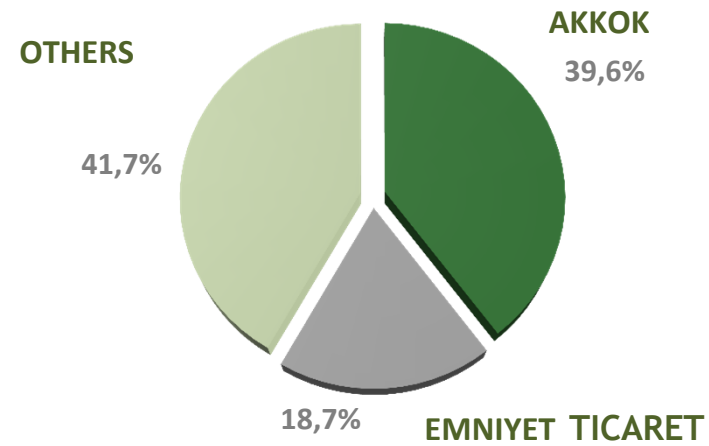
AKMERKEZ, AK TURİZM, AKİŞ, SAF GYO

OTHER SERVICES

AK-PA, DİNKAL, AKPORT, AKTEK,
AKMERKEZ LOKANTACILIK (Paper Moon)



AKKOK (Million US\$)	2007	2008	2009	2010	2011
Net Sales	1.337	1.514	2.166	2.675	2.900
Export	346	326	332	417	458



Main Strategies



- Operational excellence
 - Increasing Productivity
 - Cost Reduction
 - Reliable Quality and Service
- CRM
- Sustainable Profitability



- Producing high quality and reliable energy with cost effectiveness



- Development of R & D capabilities in terms of operational excellence
- Identifying of new business areas

STRATEGIC BUSINESS UNITS of AKSA



STANDARD ACRYLIC FIBER BUSINESS UNIT

- Largest acrylic fiber producer under one single roof in the world;
- 14 % global market share;
- Turkey's sole local producer having 67% local market share.



TECHNICAL FIBERS BUSINESS UNIT

- High value-added products / Develop fibers for technical end-use areas;
- 50% global market share in outdoor fibers



ENERGY BUSINESS UNIT

- Acquired 60 Mwe capacity Natural Gas power plant from Akenerji in 2009.
- 100 Mwe capacity dual gas power generation plant;
- 42,5 Mwe natural gas



FIBERS



WHAT IS ACRYLIC FIBER?

Acrylic fibre is a synthetic fibre that highly resembles wool,



Wool (natural fiber)



Acrylic Fiber (synthetic fiber)

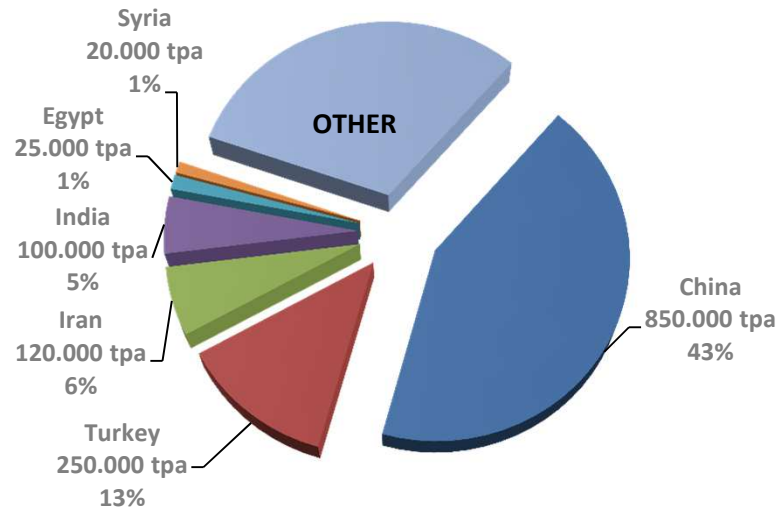
- Used in blends with natural and other synthetic fibers or by themselves,
- Easily washed and keep dimensional stability/resistant against sunlight & chemical substances,
- Dyed in brilliant colours,
- Natural and warm appearance and touch.

ACRYLIC FIBER SECTOR IN BRIEF

Acrylic fiber market accounts for 2 million tonnes in 2012. The global demand for acrylic fiber in 2020 is expected to be around the same level as 2 million tonnes.

Biggest Consumption Market is China . During 2007-2010 shrank by 20% / adopts self sufficiency strategy/invests on new capacity no more.

Yearly average consumptions:



2012	Production ('000 tonnes)	%
Asia+Pacific	1.140	57
Europe	380	19
Middle East	69	3
Turkey	285	14
USA	-	-
Africa	-	-
South America	116	6
Toplam	1.990	100

Sector has average 90% of capacity utilisation rate. 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.



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:86% in 2010, 93 % in 2011, 98% in Q32012

SUCCESS THAT COMES FROM A DIVERSITY OF PRODUCTS...

Major Acrylic Fiber Uses;



Apparel

Home Textiles & Furnishings

Industrial Uses





AKSA's Development Over 40 Years

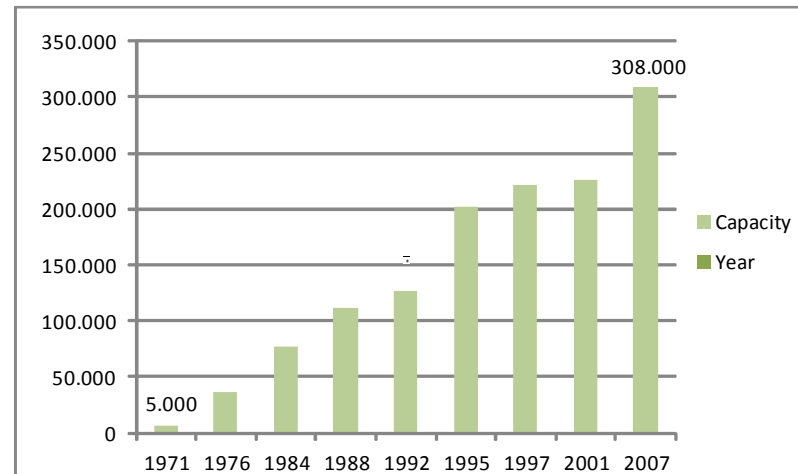


AKSA 1971
Initial Capacity 5,000tpa



AKSA Today
Capacity 308,000tpa

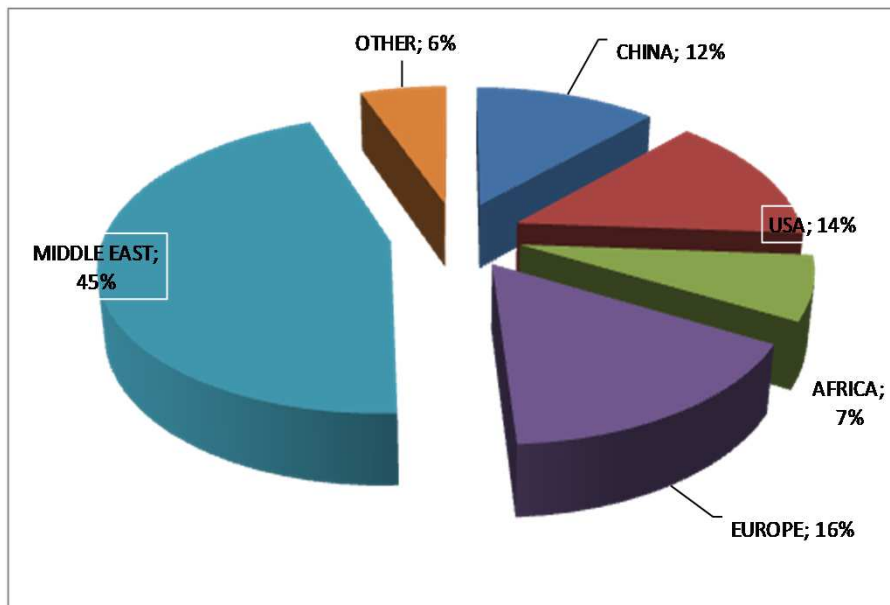
AKSA PRODUCTION CAPACITY (TON)



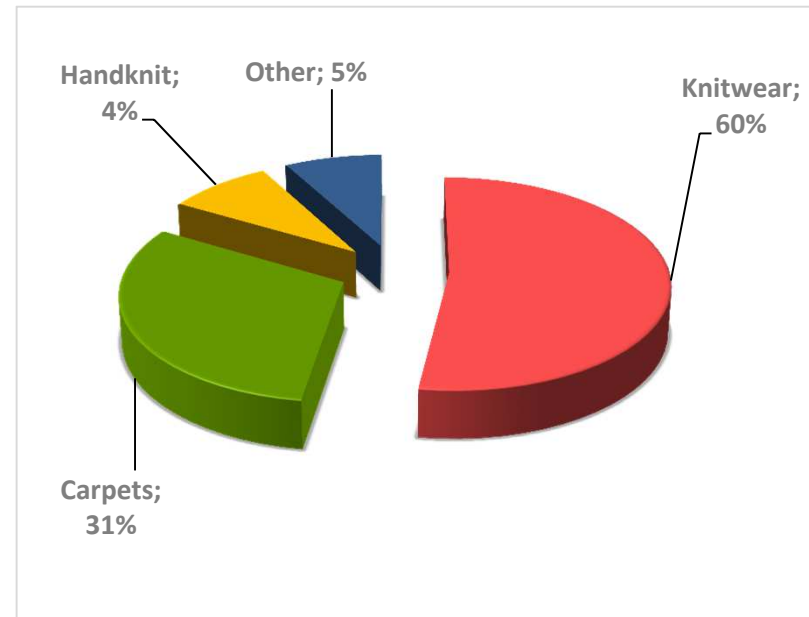
By the end of 2007, capacity reached 308,000 tpa.

2011 / SALES BREAKDOWN

EXPORT SALES BREAKDOWN (2012/Q3)



DOMESTIC SALES BREAKDOWN (2012)





ACRYLIC FIBER INDUSTRY PLAYERS

AKSA (TURKEY) / Production Capacity: 308,000 tpa

MONTEFIBRE (SPAIN) / 95,000 tpa

DRALON (GERMANY) / 188,000 tpa

FORMOSA (TAIWAN) / 72,000 tpa

THAI ACRYLIC FIBRE (THAILAND)/ 120,000 tpa

SHANGHAI PETROCHEMICALS (SPC) (CHINA) / 150,000 tpa

DAQING PETROCHEMICAL(CHINA) / 65,000 tpa

JILIN (CHINA) / 120,000 tpa

JIMONT (CHINA) / 100,000 tpa

GLOBAL PRODUCTIONS OF TEXTILE FIBERS

	1970	1980	1985	1990	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2025	2050
Synthetic Fibers	8,4	14,5	16,5	19,0	22,5	32,1	31,7	33,9	35,5	38,0	38,2	41,3	44,5	42,6	43,9	46,2	48,0	63,6	97,2
Polyester		0,0	0,0	0,0	0,0	19,1	19,2	21,0	22,3	24,4	24,7	27,8	31,1	30,7	32,0	34,0	36,0	50,0	80,0
PP fibers		0,0	0,0	0,0	0,0	6,0	5,8	5,9	6,2	6,3	6,5	6,5	6,4	5,9	6,1	6,0	6,0	7,0	10,0
PolyamidE		0,0	0,0	0,0	0,0	4,1	3,7	3,9	4,0	4,0	3,9	3,9	3,9	3,5	3,3	3,7	4,0	4,5	5,0
Acrylics		0,0	0,0	0,0	0,0	2,7	2,6	2,7	2,7	2,7	2,6	2,5	2,4	1,9	2,0	2,0	2,0	2,1	2,2
Other		0,0	0,0	0,0	0,0	0,3	0,3	0,3	0,4	0,5	0,5	0,6	0,6	0,6	0,5	0,5	0,0	0,0	0,0
Natural Fibers	16,9	19,8	24,7	22,9	24,3	28,4	27,6	28,9	28,6	30,6	33,2	34,6	35,9	33,4	31,1	32,8	33,3	41,4	52,8
Cellulosics	3,5	3,5	3,2	3,1	3,0	2,8	2,7	2,7	2,9	3,1	3,1	3,3	3,6	3,2	3,0	3,5	3,6	6,0	10,0
Cotton	11,0	14,0	19,0	17,0	19,0	19,7	19,8	20,6	20,1	22,0	24,4	25,7	26,7	24,5	22,5	24,0	24,5	30,0	37,0
Wool	1,7	1,7	1,7	2,0	1,5	1,3	1,2	1,4	1,3	1,2	1,2	1,2	1,2	1,2	1,2	1,1	1,1	1,0	1,2
Hemp		0,0	0,0	0,0	0,0	4,0	3,1	3,2	3,2	3,2	3,3	3,2	3,2	3,3	3,3	3,2	3,2	3,0	3,0
Linen	0,7	0,6	0,8	0,7	0,7	0,5	0,6	0,7	0,8	0,8	0,8	0,8	0,8	0,8	0,8	0,6	0,5	0,8	1,0
Ramie		0,0	0,0	0,0	0,0	0,1	0,2	0,2	0,3	0,3	0,3	0,3	0,3	0,3	0,3	0,2	0,2	0,3	0,3
Silk	0,5	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,2	0,2	0,2	0,2	0,2	0,3	0,3
Total	25,8	34,3	41,2	41,9	46,8	60,5	59,3	62,8	64,1	68,6	71,4	75,9	80,4	76,0	75,0	79,0	81,3	105,0	150,0
Population (billion)	3,6					5,8											7	8	9,5
Kg Fiber / person	7,0					10,3											11,6	13,1	15,8
Acrylic fibers/textile fibers (%)						4,4	4,3	4,4	4,2	4,0	3,7	3,3	3,0	2,5	2,7	2,5	2,5	2,0	1,5
Acrylic fibers/Synthetic fibers (%)						8,3	8,1	8,1	7,5	7,2	6,9	6,1	5,5	4,5	4,6	4,3	4,2	3,3	2,3

COST STRUCTURE OF ACRYLIC FIBER

The key cost component is the raw material Acrylonitrile

- Acrylonitrile prices fluctuates depending on the oil prices and the demand –supply balance;
- 30% of ACN locally sourced from PETKIM, The rest is heavily imported from Europe / US.

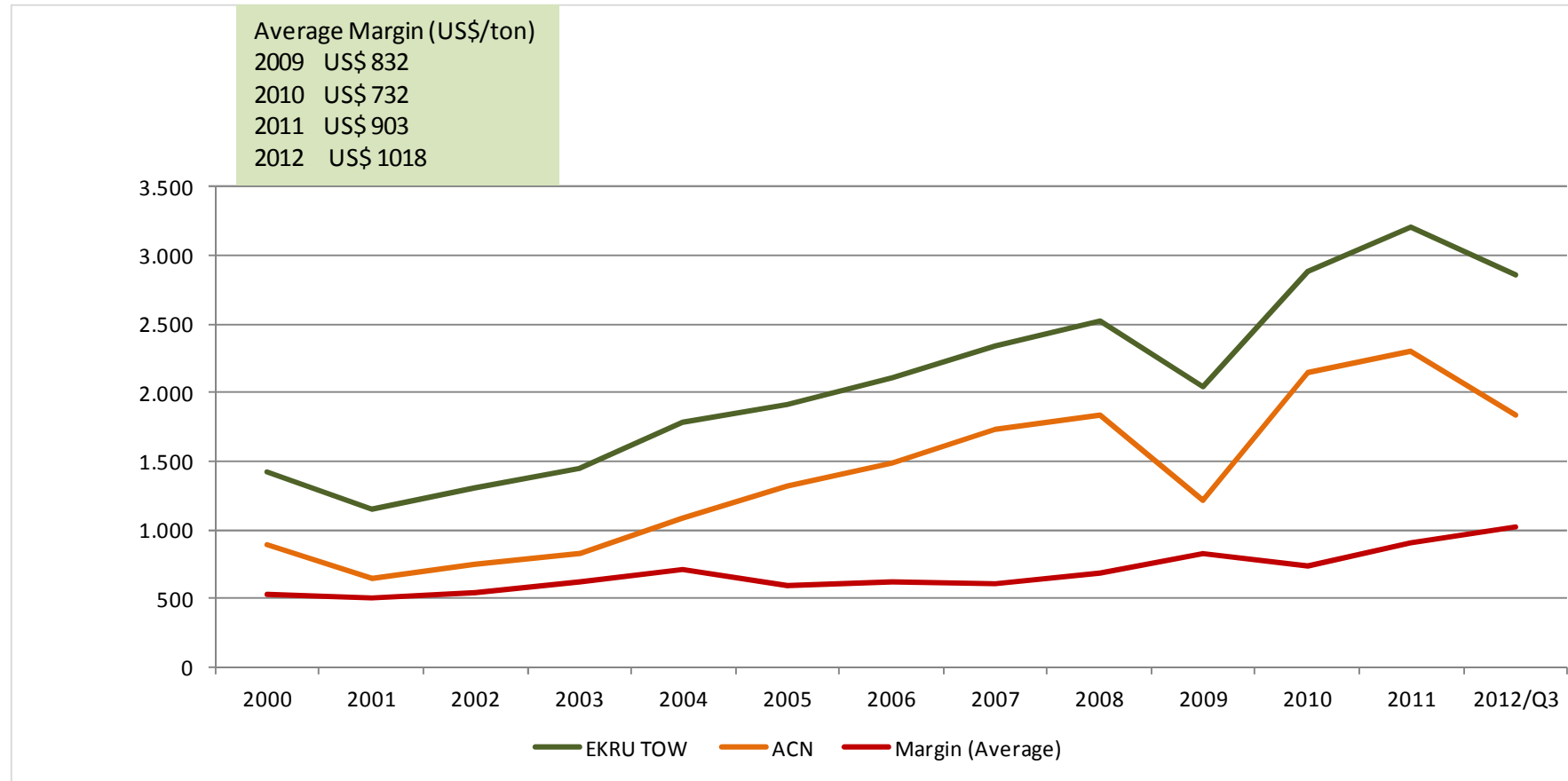
The other important cost component is “The Energy”

- Continuously improving energy specific consumption through investments;

Labor Costs

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

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



Source: PCI Average of US/Europe/Far East Prices

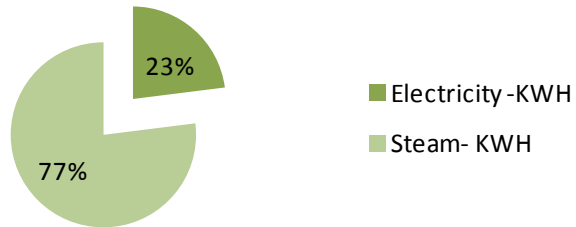


ENERGY

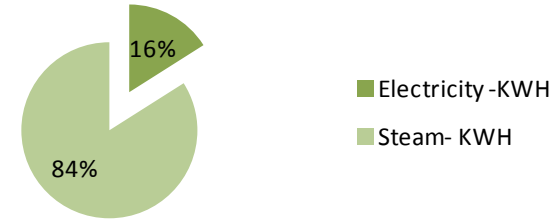


ENERGY GENERATION & TURNOVER

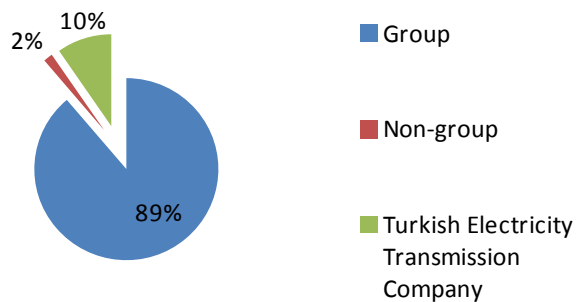
Generation (Q32012) KWH



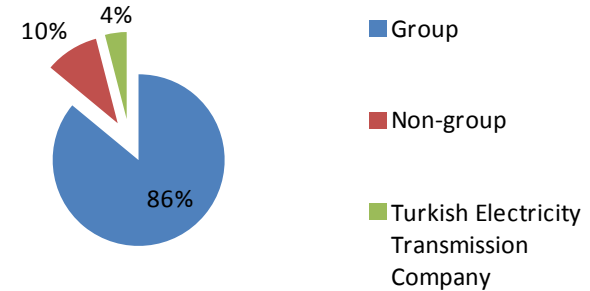
Generation (2011) KWH



Energy Turnover (Q32012)



Energy Turnover (2011)



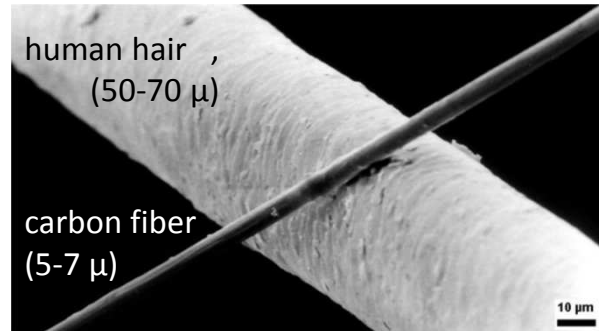
Energy Turnover
US\$ 38 million

Energy Turnover
US\$ 28 million

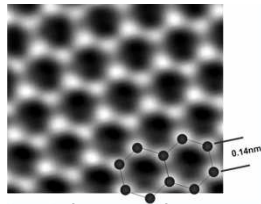


CARBON FIBER

WHAT IS CARBON FIBER?



a carbon fiber and a human hair
(source: wikipedia)



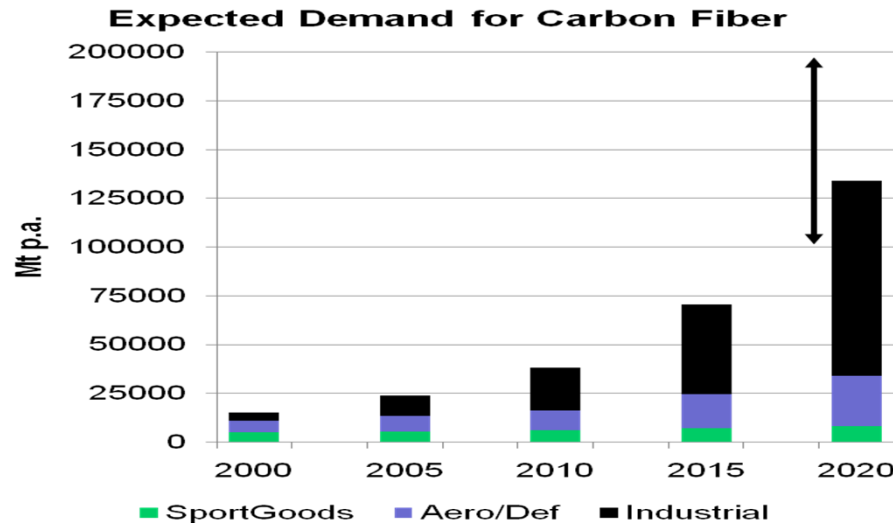
graphene sheet
(source: wikipedia)



↙
↘ "3k"
= 3,000
filaments

- Carbon fibers are extremely fine fibers (typ, 5-7 μ in dia,) consisting mostly of carbon atoms,
- Carbon fiber is >95% carbon,
- The structure of carbon fiber is similar to graphite: sheets of carbon atoms, arranged in hexagonal patterns, aligned along the axis of the fiber,
- Carbon fibers are produced in tows (yarns) ranging from 1,000 filaments (1k), to 3k, 6k, 12k, 24k, 50k, etc.

EXPECTED GROWTH IN DEMAND FOR CARBON FIBER



Carbon fibre demand was around 20,000 tonnes in 2004, The demand then doubled in the four years to 2008, We expect the market (currently 40,000 tonnes) to double by 2015 and double again by 2020.

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

Market for CF	2010	2015	2020
Mt	40	>80,000	~150.000 (100.000-500.000)
Value	US\$ 1,0-1,5 B	US\$ 2-3 B	US\$ 3-15 B



Industrial Apps 2010 vs 2020:

Wind:

5,000t → 15,000-50,000t

Compounding:

5,000t → 15,000-50,000t

Pressure Vessels:

3,000t → 15,000-50,000t

Autos:

2,500t → 20,000-100,000t

Infrastructure:

2,000t → 5,000-25,000t

Others:

5,000t → 15,000-50,000t

Aerospace Apps

2010 vs 2020:

8,000t → 25,000-30,000t

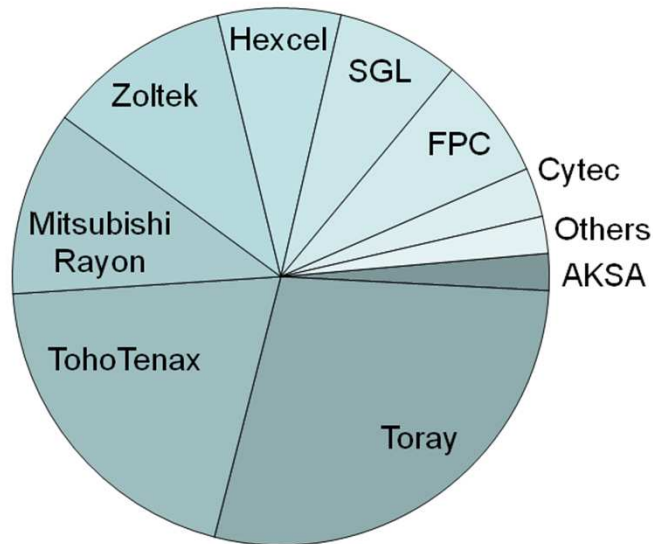
Sports Goods

2010 vs 2020:

7,000t → 10,000-15,000t

THE “UN-MET NEED” FOR CARBON FIBER

Carbon Fiber Capacity



Market Research;

- Carbon fiber has been available commercially since the 1970's,
- Demand has grown irregularly depending on new applications,
- Tight supply conditions have occurred every few years
- There appears to be an “un-met need” in the market for—high quality, reliably supplied, competitively priced carbon fiber

- With the world's largest plant producing acrylic fiber production under one roof,
- With 40+ years of know-how, own technology and experience in acrylic fiber and specialty technical fibers,
- With the resources and ability to develop PAN precursor and carbonization technology in house,
- With the resources to facilitate to produce PAN precursor and carbon fiber,

AKSA decided to develop PAN precursor and enter the carbon fiber business.



LONG-TERM MAIN GOALS

- Generate at least US\$1-1,2 billion sustainable revenues,
- Sustain EBITDA Margins around 12-13%,
- Maintain capacity utilization and low-cost leadership through cost saving projects and economies of scale,
- Develop new technical fibers to create added value and end-use areas except textile industry.



DEVELOPMENTS DURING 2012

■ Aksa Karbon Elyaf San. A.Ş. is established by partial spin off as of 2 January .

■ First phase of new co-generation power plant is successfully activated as of March.

■ Dividend payments amounting to USD 25.000.000 have been completed in May.

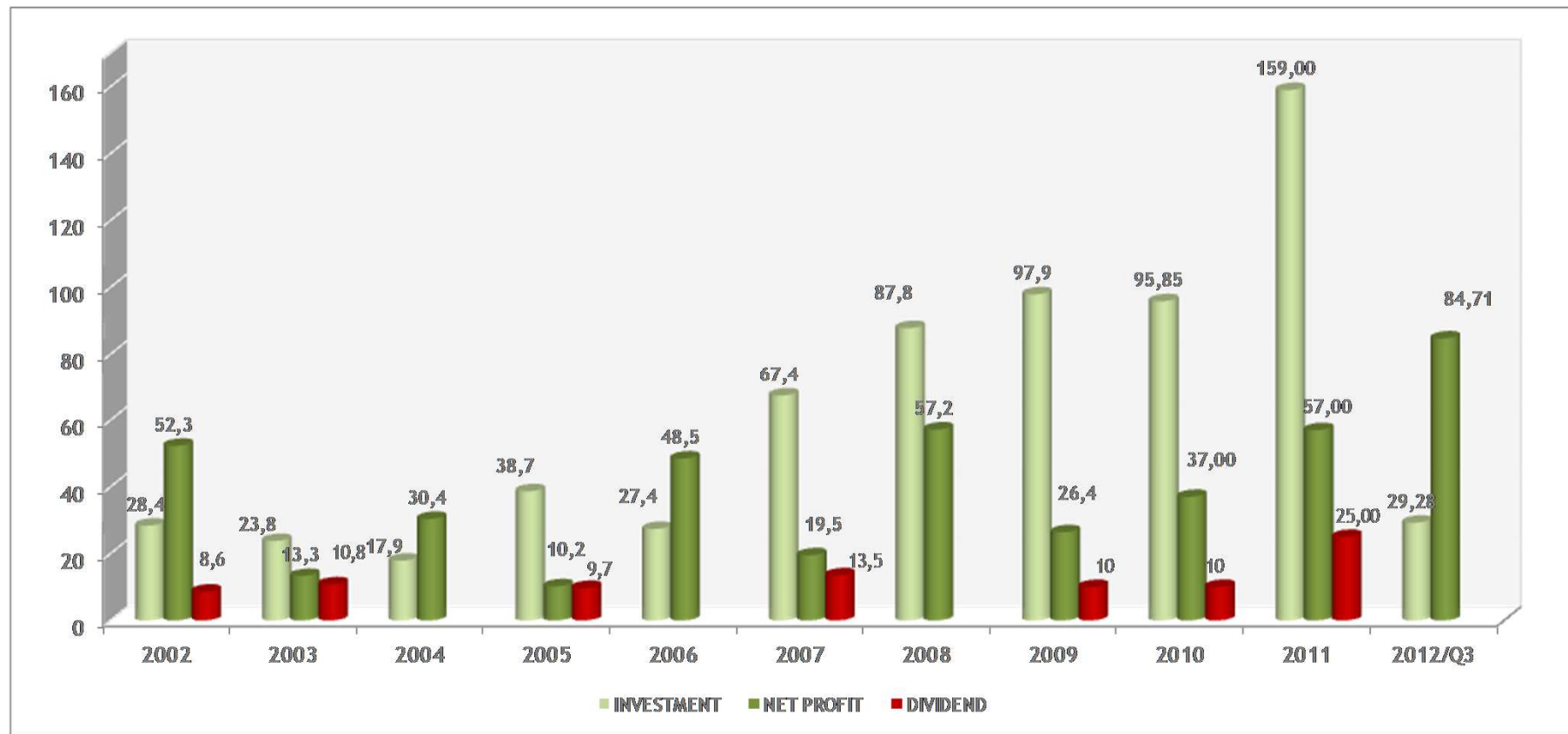
■ Establishment of 50%-50% joint venture company for carbon fiber operations is finalised with Dow Europe (50% of equity value is 185 mio USD) as of 29 June.

BUDGET FIGURES

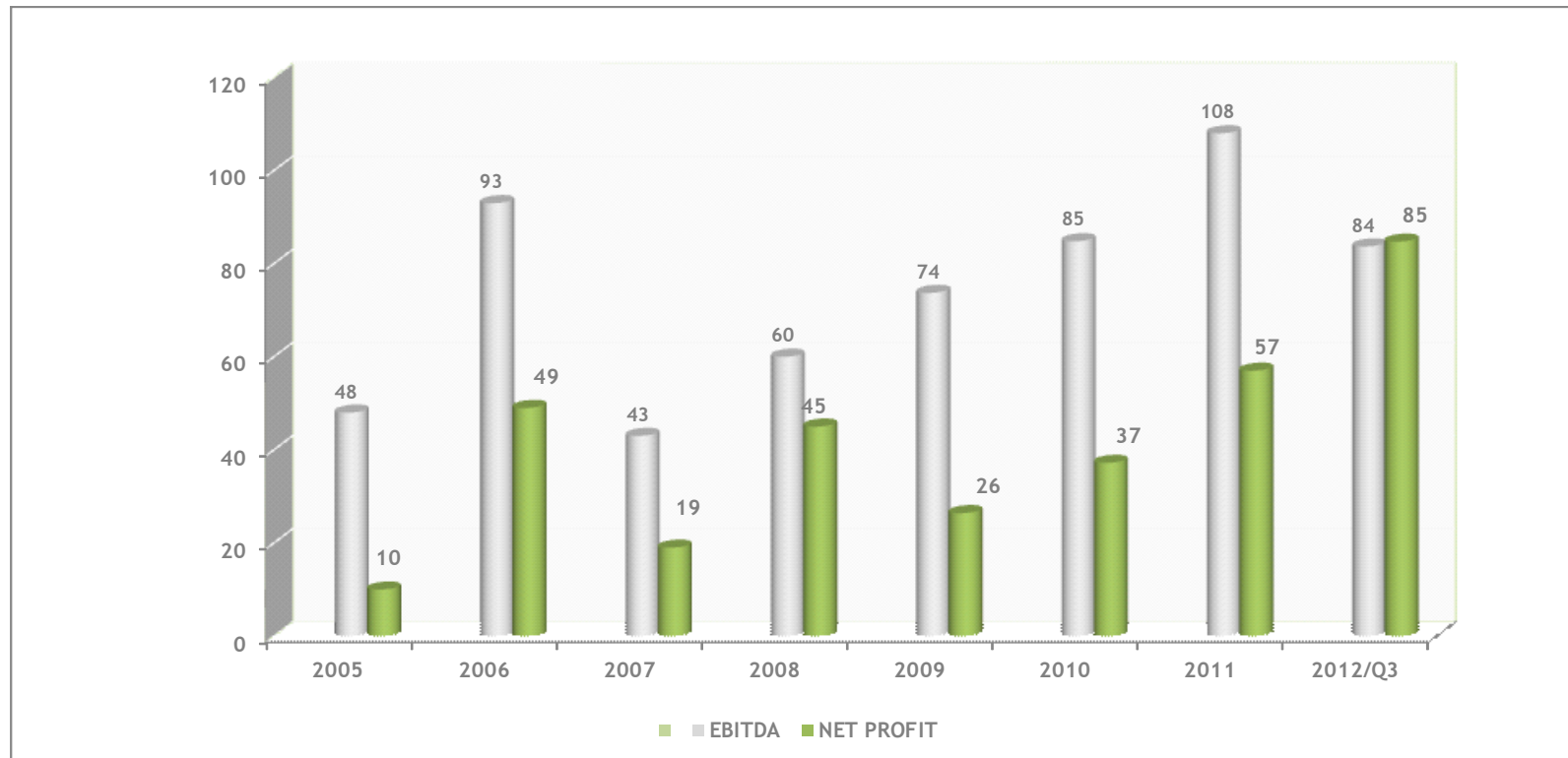
	2012 Forecast (*) (mio)	2013 Budget (mio)
Net Sales	US\$920-975	US\$820-840
AF	US\$760-785	US\$700-720
Technical Fibers	US\$60-64	US\$65-70
Energy	US\$50-53	US\$60-65
Exports	US\$300-320 Million	US\$260-280 Million
AF CUR	%92-%96	%90-%93
EBITDA margin ~	12%	12%
CAPEX	US\$60-65	US\$75-85

(*) Nine months actual

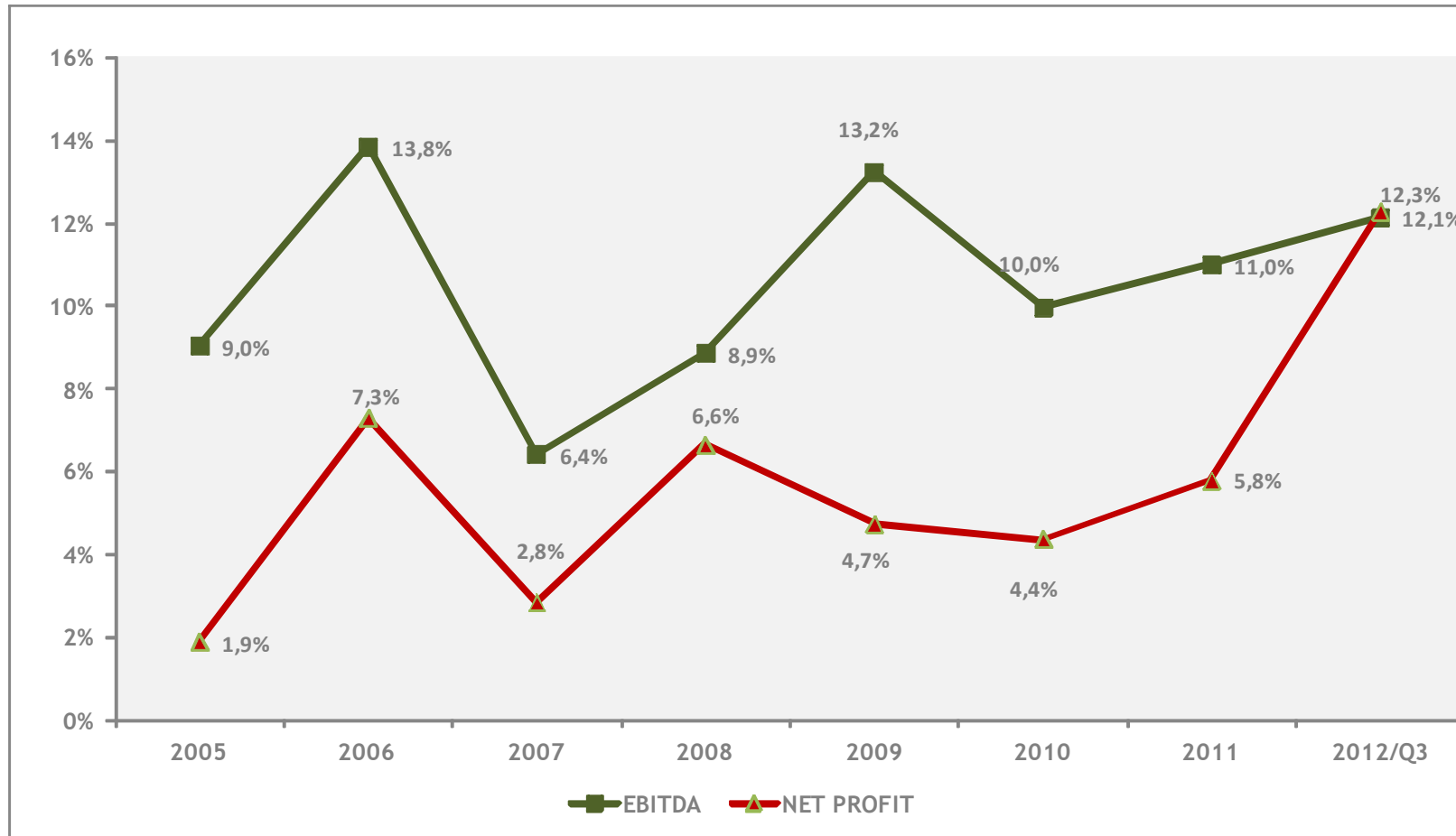
NET SALES & EXPORT (FOB) (USD mio)



EBITDA - NET PROFIT (USD mio)



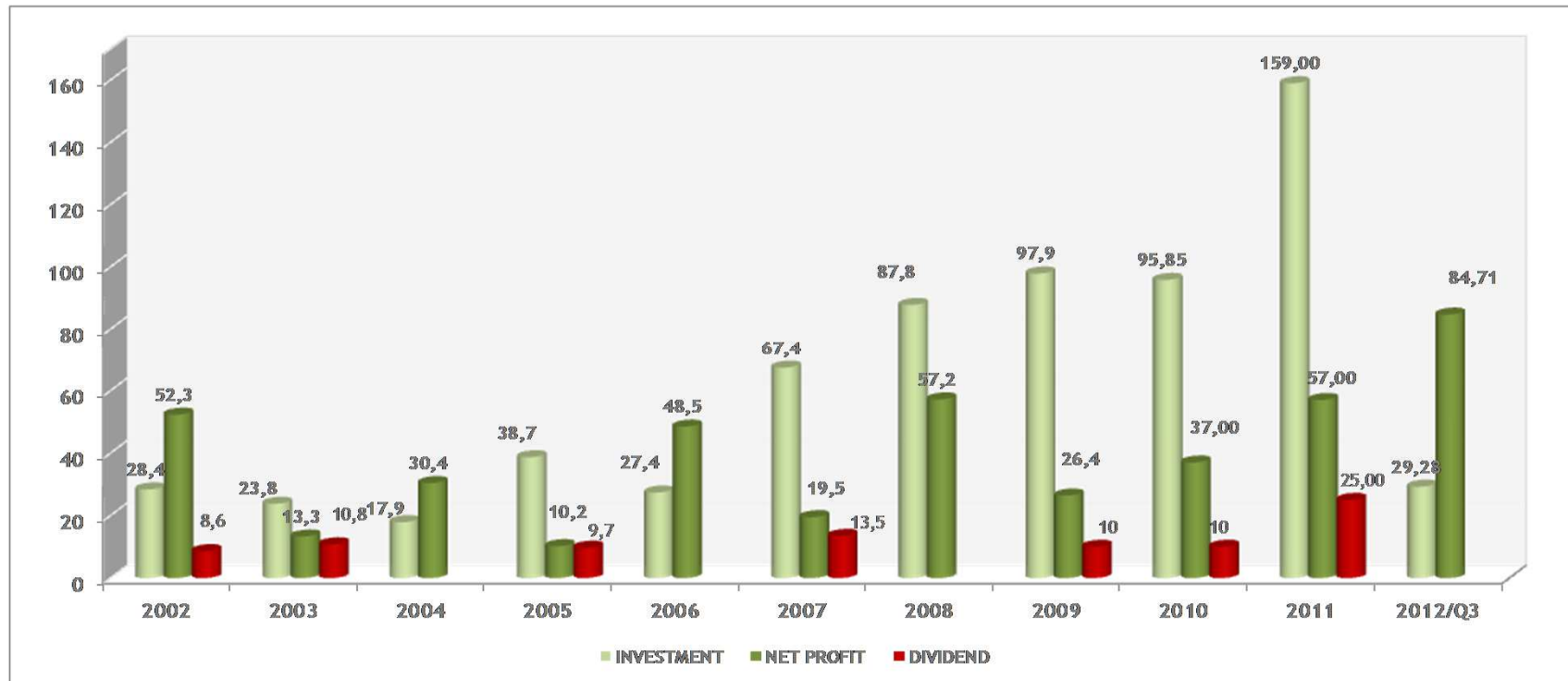
EBITDA - NET PROFIT (%)



INVESTMENT-PROFIT-DIVIDEND

2002-2012/Q3:

- Total Investment : US\$ 660,8 mio USD
- Total Net Profit : US\$ 415,6 mio USD
- Total Dividend : US\$ 87,6 mio USD



SUMMARY INCOME STATEMENT

Income Statement (million USD)	2008	2009	2010	2011	2012/Q3
NET SALES	678	556	851	978	690
EBITDA	60	74	85	108	84
NET PROFIT	45	26	37	57	85

BALANCE SHEET

Balance Sheet ('000 US\$)		2008	2009	2010	2011	2012/ Q3
ASSETS		707.481	808.967	836.241	874.882	883.053
Current Assets		376.237	390.652	388.060	406.678	401.405
	Liquid Assets	26.685	64.003	36.832	45.056	37.151
	Receivables	264.282	218.251	211.656	212.450	195.114
	Inventories	63.738	73.592	88.627	101.316	127.033
	Other	21.532	34.806	50.945	47.857	42.107
Long Term Assets		331.244	418.316	448.181	468.204	481.648
	Long Term Trade Receivables	8.375	7.792	6.179	569	2.649
	Financial Assets	17.945	18.024	17.554	733	744
	Joint Venture Investments	-	-	-	-	130.382
	Tangible Assets	281.527	353.984	416.635	444.129	333.828
	Intangible Assets	128	4.393	3.344	11.333	2.605
	Other Long Term Assets	23.269	34.123	4.469	11.441	11.441
LIABILITIES		707.481	808.967	836.241	874.882	873.597
Current Liabilities		158.370	209.146	227.168	229.220	242.609
	Financial Liabilities	66.719	87.856	85.478	91.580	85.051
	Trade Payables	75.029	109.854	134.669	133.815	153.733
	Derivative Financial Instruments	1.362	-	-	-	-
	Other Short Term Liabilities	15.260	11.436	7.021	3.825	3.825
Long Term Liabilities		100.070	121.144	117.949	195.163	96.761
	Financial Liabilities	80.070	91.253	90.108	169.540	82.363
	Trade Payables	-	1.697	-	-	-
	Derivative Financial Instruments	3.098	2.515	3.234	2.210	1.381
	Provisions for Debt and Expenses	4.923	6.306	7.218	7.528	7.890
	Deferred Tax Liabilities	9.044	9.478	8.679	9.096	4.728
	Other Long Term Liabilities	2.934	9.895	8.709	6.788	399
Shareholders' Equity		449.041	478.677	491.124	450.499	534.226



THANK YOU

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