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European Energy Venture Fair 2003  
27/28 October 2003

Felix Goedhart, CEO:

„Successful trade sales in the energy space“

# AGENDA

- I. Characteristics of the Energy Sector
- II. Private Equity in the Energy Sector
- III. M & A activity and exit examples
- IV. Conclusions for institutional investors

## I. Characteristics of the Energy Sector

## **The Energy Sector is one of the major global industries with stable and sustainable growth rates**

- Global annual revenues of approximately \$ 4.5 trillion
- European Market Capitalisation of approximately \$ 250 billion
- Global energy demand will increase by 3 % p.a. over the next 20 years despite significant higher efficiency at power production
- Volatility of the Energy Sector has been substantially lower than in most other industries over the last years
- Due to recent power blackouts in the US, UK and Italy the Energy Sector is gaining more public attention

## The Energy Sector currently undergoes a fundamental transformation process

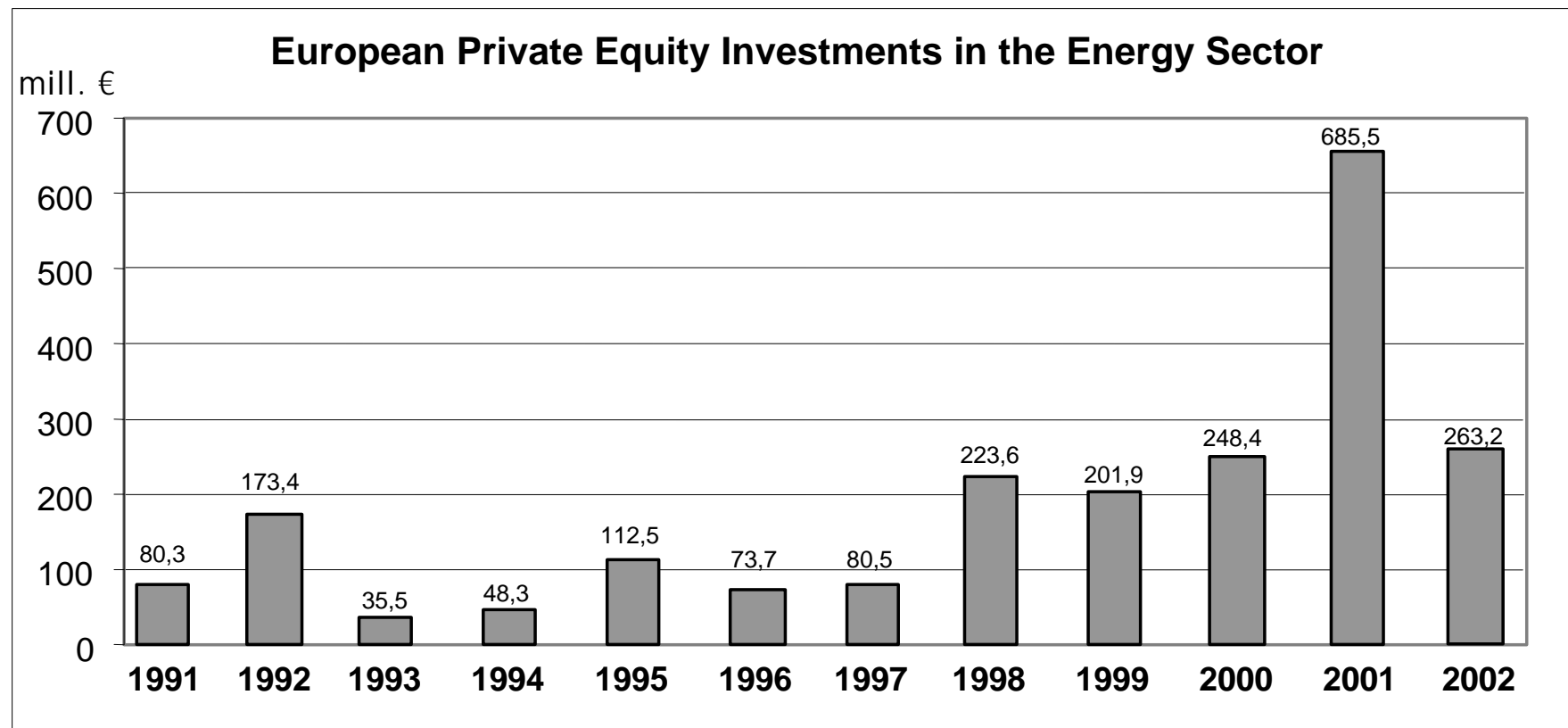
- Increased deregulation mainly in Europe will enforce unbundling and stimulate competition
- Stronger competition puts large utilities under pressure resulting in clearer focus and higher efficiency
- Ongoing privatization effects historical market structures
- Multinational consensus regarding renewable energies and sustainability will cause major changes in the energy mix over time and create new industry sub sectors
- New technologies will challenge established business models and create new business opportunities

## **This environment creates first class investment opportunities for Venture Capital and Private Equity Funds**

- Privatization of municipal utilities in most european countries
- Corporate spin-offs of non-core entities or assets
- Off-balance sheet financings of production or grid assets
- New technologies for higher efficiency at power production
- New technologies for the reduction of CO<sub>2</sub> output, i. e. filters
- Decentralized power production with fuel cells, microturbines or solar cells
- New technologies for energy transport and storage, i. e. superconductors or high performance batteries

## II. Private Equity in the Energy Sector

## Investments in the Energy Sector have increased but remain small compared to industry size



Source: EVCA Yearbook, 1990 -2003 editions

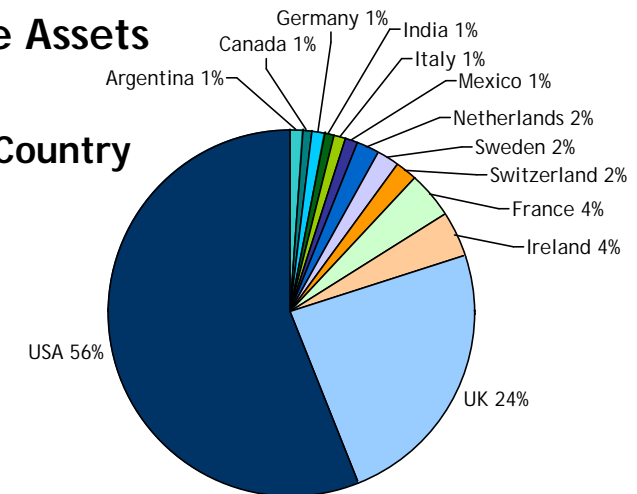
## On a global scale most deals have occurred in utilities and pipelines

### The Buyers (>1 deal)

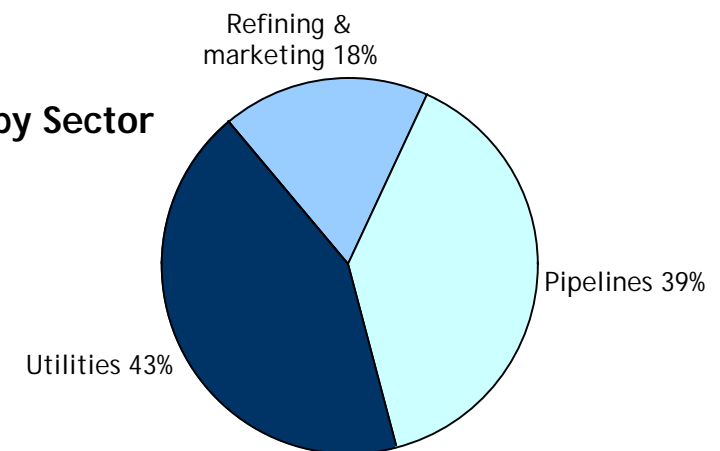
Rank	Sponsor	No. of deals
1	Natwest Equity Partners	8
2	JPMorgan Capital Partners	7
3	Warburg Pincus & Co.	4
3	Morgan Stanley Capital	4
5	3i	3
5	Legal & General	3
5	HSBC Private Equity	3
5	CVC	3
5	Citicorp Ventures	3
5	Carlyle Group	3
11	Alchemy	2
11	Appollo	2
11	Centre Partners	2
11	Chartwell Investments	2
11	Hicks Muse Tate	2
11	Holding Capital	2
11	Kelso and Co.	2

### The Assets

#### by Country



#### by Sector



### III. M & A activity and exit examples

## M & A activity in the Energy Sector has been substantial for large transactions...

### Large Utility M & A transactions in the past 12 months

Announced	Effective	Target	Country	Acquiror	% Acq.	Consid	FV (\$mm)
Apr 02	Okt 02	Lattice	UK	National Grid	100,00	Stock	<b>9.378</b>
Mai 03	Mrz 03	Ruhrgas AG	Germany	E ON AG	58,40	Cash	<b>5.655</b>
Mai 03	Mai 03	Northumbrian Water	UK	Investor Group	75,00	Cash	<b>3.375</b>
Okt 02	Okt 02	TXU UK	UK	PowerGen PLC	100,00	Cash	<b>2.507</b>
Nov 02	Jan 03	ITALGAS	Italy	ENI SpA	98,00	Cash	<b>2.424</b>
Jul 01	Dez 02	Edison SpA	Italy	Italenergia	34,37	Cash	<b>2.139</b>
Mai 02	n.d.	Aquila Inc. And FirstEnergy Corp. (Aquila Sterling Ltd.)	US	Scottish and Southern Energy plc	n.d.	n.d.	<b>1.819</b>
Sep 02	Mrz 03	REMU NV	Netherlands	Eneco Energie NV	100,00	Cash	<b>1.490</b>
Feb 02	n.d.	Reliant Resources Inc. (European generation asset)	US	Nuon NV -Onderneming voor Gelderland Friesland & Flevoland NV	n.d.	n.d.	<b>1.289</b>
Jun 02	Apr 03	National Property Fund	Czech	CEZ	100,00	Cash	<b>1.203</b>
Apr 02	n.d.	United Energy Ltd (77%)	Australia	AlintaGas Ltd, AMP Henderson Global Investors	n.d.	n.d.	<b>1.113</b>
Apr 02	n.d.	Viterra Energy Services AG	Germany	CVC Capital Partners Ltd	n.d.	n.d.	<b>994</b>
Jul 03	Jul 03	Gelsenwasser	Germany	Investor Group	80,50	Cash	<b>939</b>
Nov 02	Jan 03	Interpower SpA	Italy	Investor Group	100,00	Cash	<b>925</b>
Mai 02	n.d.	Sithe Energies Inc. (Remaining 50% stake)	US	Exelon Corp	n.d.	n.d.	<b>650</b>
Jun 02	n.d.	Hafslund ASA (Power Plants)	Norway	Oestfold Energi AS, Akershus Energi AS, Energislskapet Buskerud AS	n.d.	n.d.	<b>646</b>
Mrz 03	Aug 03	Naturcorp SA	Spain	Hidrocantabrico	62,00	Assets	<b>597</b>
Aug 03	Aug 03	Graninge AB	Sweden	Sydskraft AB	36,30	Cash	<b>597</b>
Sep 02	Jan 03	NRG Czech	Czech	ATEL	100,00	Cash	<b>525</b>
Jun 02	Apr 03	CEPS AG	Czech	Osinek	51,00	Cash	<b>488</b>
Nov 02	Nov 02	Dyengy Storage - Rough	UK	Centrica PLC	100,00	Cash	<b>483</b>
Feb 02	n.d.	Sithe Asia Holdings Ltd	China	China Resources Group Holdings Co Ltd	n.d.	n.d.	<b>460</b>
Dez 02	Mrz 03	Union Fenosa Gas SA	Spain	ENI SpA	50,00	Cash	<b>438</b>
Mrz 02	n.d.	AES Corp (Meghnaghat and Haripur Plants)	Bangladesh	CDC Group Plc	n.d.	n.d.	<b>437</b>
Apr 01	Nov 02	Enel SpA-Milan	Italy	AEM Milano	100,00	Cash	<b>370</b>
Nov 02	Mrz 03	EHN Group	Spain	Investor Group	37,00	Assets	<b>306</b>
Dez 02	Mai 03	Stadtwerke Luebeck	Germany	SCHLESWAG AG	49,90	Cash	<b>249</b>
Apr 03	Apr 03	Gas Natural SDG SA	Spain	Caixa d'Estalvis	3,00	Cash	<b>237</b>
Nov 02	Feb 03	Wuppertaler Stadtwerke	Germany	Investor Group	33,30	Cash	<b>234</b>
Mai 02	Dez 02	ACEA Assets	Italy	Electrabel SA	50,00	Cash	<b>228</b>
Aug 03	Aug 03	TXU Norge Svartisen	Norway	Investor Group	100,00	Cash	<b>227</b>
Dez 02	Dez 02	Gamesa SA-Wind Parks	Italy	Electrabel SA	100,00	Cash	<b>204</b>
Sep 02	Sep 02	Dynergy Storage -Hornsea	UK	SSE	100,00	Cash	<b>201</b>

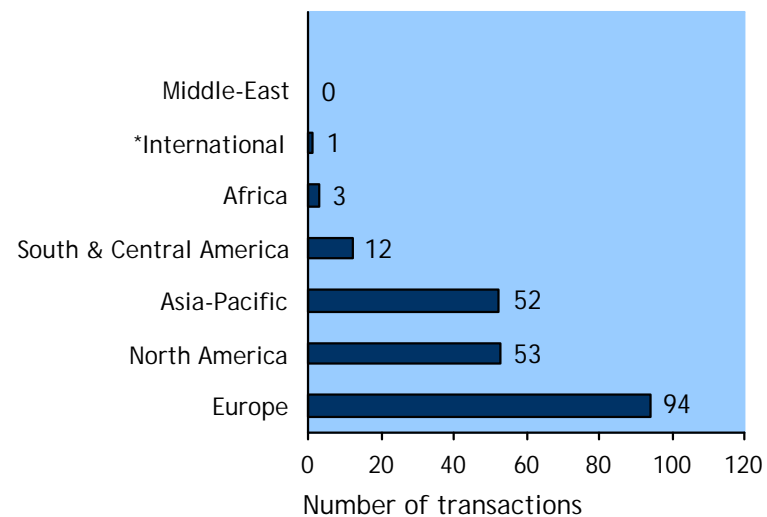
## ...and for smaller transactions as well

### Midsize/small M & A transactions in the Energy Sector since 1998

#	Date	Location	Company	Segment	Type of Deal	Vendor	Acquirer	Total Consideration
1	Mid 98	UK	PSL Holdings	Oilfield Services	IBO		Bridgepoint	€ 70 m
2	Oct 98	Switzerland	Melcher	Electrical Power Supplies	Share Deal	SBC Eq. Partners	Power One (US)	US \$ 53 m
3	Jan 03	Germany	D. Tecalemit	Oil Lubrication Equipm.	80% buy	Siebe plc	For&Col Ventures	DM 50 m +
4	Mar 99	Switzerland	Haenni Group	Pressure & Temperature Measuring	75% buy	Zehnder AG	CGS Priv. Equity	n. d.
5	Feb 03	Germany	MEKU	Oil & Gas burner nozzles	MBO	Gisbert Fischer	GVB + 3i	€ 5.4 m +
6	Apr 03	Germany	IndustrieSerVis	NearInfraRed drying&cooling tech	35.1% buy/Cap Incr.	K.Bar, R.Gaus	HVB BetGes	n. d.
7	Mid 99	UK	Star Energy	Oil & Gas field operator	IBO	SOCO	Europ Acquis Finance	n. d.
8	May 99	Germany	Cerobear GmbH	Ceramic bearings & components	ExpFin for 15%		3i	€ 2 m +
9	Sep 03	Aberdeen	AFOS Group	Oil filtration	IBO		3i (60%)	€ 12 m
10	Dez 03	Germany	Kota Köhn	Coating Technology	ExpFin for 13%		3i	n. d.
11	Feb 00	Barnsley/UK	Kenton Utility&Development	MechanicEngineering to Gas&Water Ind	MBO	Utilitec	ICC venture capital, debtBoS	€ 21 m
12	Mar 00	Liverpool	OSS group	Waste oil & recycling	ExpFin		DunedinEnterprlnvTr,debtBHF	€ 13 m
13	Mar 00	Leeds	Greenway	WasteOilRecovery&Lubric Manufacture	Acquis, PtoP	Shareholders	DunedinEnterprlnvTr,debtBHF	€ 13 m
14	Apr 00	Germany	Energbyynet AG	Online ServPlattf for EVUs	ExpFin		Apax, LBD Vproj.	€ 20 m +
15	May 00	Cardiff	Hyder	Water & Electricity supplier	IBO,PtoP	Shareholders (LSE)	Nomura	€ 671 m
16	May 00	Germany	Astromo.de	Utility Cost Calculating Software	ExpFin		Apax	€ 1 m
17	May 00	UK	Star Energy	Oil & Gas field operator	ExpFin		Europ Acquis Finance	€ 30 m
18	May 00	UK	ROC	Processing facilities (Assets)	Acquisition		Star Energy	€ 37 m
19	Jun 00	Aberdeen	AFOS/SpecialtyPetroServices	Oil well filtration	Merger		3i (keeps majority after merg)	€ 25 m
20	Aug 00	Hertfordshire	Wastepack group	Waste recycling	IBO	private shareholders	Duke Street	€ 50 m
21	Aug 00	Aberdeen	PSL Holdings	Oilfield Services	ExpFin		3i, Bridgepoint	€ 18 m
22	Aug 00	Bergen/N	AGR Ability Group	Oil Services	Acquisition		PSL Holdings	€ 30 m
23	Oct 00	Aberdeen	Sparrows OS Serv	Crane Contracting to Oil Industry	IBO	Rentokil Initial	3i, (BoS Debt)	€ 18 m
24	Jan 01	Germany	Messer Griesheim	Industrial Gas company	IBO	Aventis (66%)	ACP, GScp	€ 700 m
25	Jan 01	UK	Servista.com	Online utilites company	2nd round		Innotech, TXU Europe, Sofin	€ 11 m
26	Feb 01	Aberdeen	SPS-AFOS	Filtration Services Provider	ExpFin		3i	€ 10 m
27	Feb 01	Louisiana/US	Global Completion Services	Oil Services Company	100%Sale	private shareholders	SPS-AFOS (3i)	n. d.
28	Feb 01	Germany	Wendt SIT GmbH	Sound Insulation Technology	MBO	KMH IndServHold	Berenb PE	n. d.
29	Mar 01	UK	BizzEnergy	Online Gas & Electrical Supplier	2nd round		Atlas V./Gerrard	€ 10 m
30	Mar 01	France	Elf Antargaz	Propane & Butane gas distributor	IBO	TotalFinaElf	Paribas, UGI, Medit M	€ 520 m
31	Apr 01	Kent	Mid Kent Holdings	Water Services Company	PtoP (LSE)		Swan, WestLB	€ 320 m
32	Apr 01	Germany	Vectriz AG	Energy & Telecom billing software	ExpCap		Target Partners	€ 2.5 m
33	Apr 01	Sweden	Studsvik	Nuclear Power Service Group	ExpFin		Atle, Euroventure	€ 35 m
34	Apr 01	Inverness	Wavegen	Renewable energy comp	2nd round		ML, 3i, Unotec, AGIP	€ 8 m
35	May 01	Finland	IVO Transmission Engineering	Power transmission etc.	IBO	Fortum	CapMan	€ 33 m
36	Jun 01	Germany	SuNyx Surface Nanotechnology	Water-repellant microsufaces	ExpCap for 25%		Ventizz	n. d.
37	Jun 01	London	Windforce	Wind energy projects	1st round		Gerrard Energy Vent. (L)	€ 7 m
38	Aug 01	Aberdeen	MacAlpine	Pipeline & Plant cleaning	MBI	group Alfred McAlpine	Aberd Murray Johnstone	n. d.
39	Aug 01	Germany	Ionity AG	Lithium Polymer Battery Technology			3i, VEAG, Eon, Cap.	€ 18 m invest
40	Sep 01	Freiburg	GWE	Energy for Industrial Customers	ExpCap for Minority		3i	€ 3.5 m
41	Sep 01	Arzberg	Purus AG	Recycling	ExpCap for Minority		GBK Bet + BayK	€ 5 m
42	Oct 01	Aberdeen	Grampian Testing & Certification	Stress test to Offshore Oil Sector	MBO	founders	Man + BoS	n. d.
43	Feb 02	Yorkshire	West's Engineering	Project Managem.to Nuc Power Industry	MBO	Interserve	Northern Venture Managers	€ 8 m

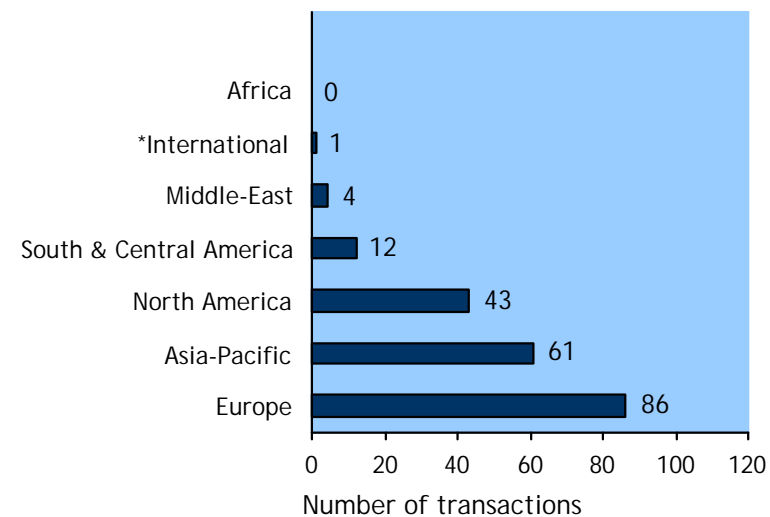
## M&A activity remains focused on Europe with 42 % of all transactions in 2003

Transactions by target - 1st half 2002



Note: \*GE Power Systems purchase of manufacturing facilities and wind turbine assets from Enron.

Transactions by target - 1st half 2003



Note: \*Purchase of generation assets in Turkey and Pakistan from Scottish and Southern by International Power

Source: PricewaterhouseCoopers

## Private Equity Funds were able to realise attractive exits in recent years

Company	Type	Initial Investment	Exit date	Exit Type	IRR/Multiple	Business
Silicon Energy	VC	1997	2003	Trade Sale to Itron Inc. (ITRI)	n.d.	Power testing and supply equipment
Bear Paw Energy	Expansion	2000	2001	Trade Sale to Northern Border Partners(NPP)	194 % / 4,6x	Independent gatherer and processor
Capstone Turbine	VC	1999	2001	IPO	n.d. / 10x	microturbines
Caminus Corp.	VC	1998	2000	IPO	40 % / 3,0x	Software and Consulting
Evergreen Solar	VC	1995	2000	IPO	n.d.	Solar panels
Elgar Electronics	Buyout	1996	1998	Trade Sale to J.F. Lehmann	178 % / 7,13x	Energy Management Software

## IV. Conclusions for institutional investors

## The timing is right for an investment in the Energy Sector

- The stable and less volatile Energy Sector offers a wide range of investment opportunities for Venture Capital and Buyout Funds
- M & A activity is substantial and lucrative exits have been realized
- Private Equity Investments in the Energy Sector are growing but still small by comparison
- Industry generalist VC and Buyout Funds have increased investment activity in the Energy Sector
  - Doughty Hanson & Co. acquired LM Glasfiber in 03/2001
  - Draper Fisher Jurrvetson invested in Konarka Technologies and Solicon in 10/2002 and 08/2003 respectively
  - CVC acquired Viterra Energy Services in 04/2003
  - Terra Firma targets municipal utilities as one main area of focus
- An increasing number of industry specialized VC and Buyout Funds come to the market
  - Energy Capital Fund (ECF) with industry partner E.ON AG
  - Carlyle Riverstone Global Energy and Power Fund
  - US Power Fund, Nth Power, Enertech etc.
  - NORDCAPITAL Power Fund as the first pure energy fund of funds