



**FDE**

PRICE VALUATION (UPSIDE) **EUR40.6**  
**EUR42 (+3%) ■ EUR61 (+50%)**

VALUATION RANGE

↗ 35% | ↗ 33%

EPS 06/22e

↗ 56%

EPS 06/23e

↗ 97%

# Carbon negative energy producer aligned with Europe's ambitions

15 MARCH 2022 at 16:52\*

**Thomas Martin**

(+44) 203 430 8435

Thomas.Martin@exanebnpparibas.com

## FDE's business is aligned with the key themes that are emerging

We are deeply saddened by the humanitarian impact of the Ukraine invasion. These developments have also fundamentally changed the outlook for European energy supply and demand, and whilst there is clearly uncertainty, we believe FDE's business is aligned with the key emerging themes.

### 1) European gas and power prices are likely to remain elevated

Plans to reduce Russian gas reliance are likely to see elevated pricing persist. FDE produces green energy in France and Belgium with a negative life-of-project carbon footprint; a portion of these sales are exposed to high market prices. The business was profitable prior to recent price increases and generated positive operating cash-flows during the low priced post-COVID period.

### 2) Domestic resources have increased strategic value

European sources of power generation and gas reserves are increasingly important as reliance on Russia is reduced. FDE plans to continue growing its green power supply business in Europe, and holds a large acreage position over a CBM resource; one of the largest undeveloped onshore gas resources in Western Europe.

### 3) Green energy sources remain particularly prized

Europe's long-term commitment to reduce carbon emissions is undoubted, but the more rapid routes to reduce reliance on Russian energy require contributions from higher carbon technologies, placing even more importance on low carbon options.

## Increasing valuation range to EUR42-63/sh

Incorporating higher gas and power prices increases our risked NAV based valuation range to EUR42-61/sh from EUR31-46/sh, an increase of ~34% at the mid-point. The shares offer ~3% upside to the lower end of our valuation range which is set in-line with the risked NAV of the 2022 developments. We see ~50% upside to the upper end of our valuation range, incorporating future projects.

Price (14 March 2022)	EUR40.6	Performance <sup>(1)</sup>	1w	1m	3m	12m
Market cap (EURm)	210	Absolute(%)	4	27	40	75
Free float (EURm)	210	Rel. Utilities(%)	(1)	28	44	67
EV (EURm)	246	Rel. MSCI SMID(%)	(2)	33	53	75
3m avg volume (EURm)	0.5					
Refinitiv / Bloomberg	LFDE.PA1 / FDE FP					
Country	France					

Financials	06/22e	06/23e	06/24e	06/25e	Valuation metrics	06/22e	06/23e	06/24e	06/25e
EPS, Adjusted (EUR)	1.46	7.08	5.63	5.76	P/E (x)	27.8	5.7	7.2	7.0
EPS, Company (EUR)	1.46	7.08	5.63	5.76	Net yield (%)	0.0	0.0	0.0	0.0
EPS - Refinitiv (EUR)	1.12	2.73	2.84	2.32	FCF yield (%)	(7.3)	8.7	1.6	13.1
Net dividend (EUR)	0.00	0.00	0.00	0.00	EV/Sales (x)	9.9	3.2	3.3	2.5
Sales (EURm)	24.9	70.2	68.8	79.1	EV/EBITDA (x)	16.9	4.1	4.5	3.6
EBITDA, Adj. (EURm)	11.5	50.6	40.6	41.5	EV/EBITDA (x)	21.4	4.5	5.5	4.7
Net profit, Adj.(EURm)	7.5	36.6	29.1	29.8	EV/CE (x)	2.3	1.8	1.5	1.2
ROCE (%)	8.2	29.8	19.7	19.6					
Net Debt/EBITDA, Adj. (x)	2.4	0.3	0.3	-					

Source: BNP Paribas Exane (estimates), Refinitiv (consensus) (1) In listing currency, with dividend reinvested

**SPONSORED RESEARCH: Exane is receiving compensation from FDE to cover and produce research on the stock.**

\* Date and time (London Time) on which the investment recommendation was finalised. It may differ from the date and time of broad dissemination on the website. See Appendix (on p35) for Analyst Certification, Important Disclosures and Non-US Research Analyst disclosures.

## Contents

Aligned with the new European energy landscape	3
European energy prices likely to remain high for an extended period	3
We increase our price forecasts; sensitivity analysis is key	3
The gas market is also driving European power markets – key charts	4
Valuation range increased ~34% at the mid-point	8
Detailed NAV breakdown	8
Breaking down the sensitivities across the portfolio	10
<b>Business Review – High Returns European Green Energy Generation</b>	<b>16</b>
FDE generates green power whilst reducing methane emissions	16
Benefitting from strength in European power and gas prices	16
Increased base-case cash generation forecasts	16
CHP expansion driving volume and revenue growth	17
Funding position more than adequate	19
Operating cash-flow price sensitivities	21
FDE's business is profitable at much lower prices	23
Hedging should be reducing exposure to price swings	25
Coal-Bed Methane – a large, undeveloped domestic gas resource	25
Will energy producers be able to retain all the gains?	26
Financial forecasts	28
Appendices – price forecasts and futures curves	31
Investment case, valuation and risks	33
Company profile and financial highlights	38

## Aligned with the new European energy landscape

### European energy prices likely to remain high for an extended period

The Russian invasion of Ukraine has had a material impact on commodity and power markets, pushing prices significantly higher from already elevated levels. The environment is characterised by high levels of uncertainty and volatility is likely to remain high.

Europe has stated its intent to significantly reduce its reliance on Russian gas, which will take time. This indicates robust competition for available gas supplies, suggesting gas prices are likely to remain high in a historical context. Gas plays an important role in European dispatchable power generation and high gas prices are likely to be accompanied by high power prices, which have been set by gas in recent months.

Governments have begun to sanction Russian oil & gas and companies have increasingly moved to 'self-sanction' (particularly oil). Russia has also threatened to shut-off gas supplies via the Nord Stream 1 pipeline in retaliation to sanctions.

### We increase our price forecasts; sensitivity analysis is key

We revise our forecasts to reflect changes to BNPPE's gas price outlook and our power price forecasts. We readily admit that with volatility almost certain to remain extreme, our absolute forecasts are likely to be proven wrong given the cross commodity, political and economic uncertainties. We do, however, have conviction that gas and power prices will remain elevated for an extended period, and that reducing European reliance on Russian energy supplies will take time and cause pain. Energy demand needs to fall and higher prices will be a tool by which this is achieved.

Our base case forecasts assume Russian gas exports will not be sanctioned and that Russia will continue to supply European gas markets; consequently we forecast European gas prices will retrace as we move towards warmer spring weather, assuming continued Russian supplies.

We expect gas inventories to rebuild during 2022, aided partially by initiatives to reduce demand and source alternative supplies. The REPowerEU initiative calls for legislation to ensure EU gas storage facilities are filled to at least 90% of capacity by 1 October each year, which would provide a buffer during the winter heating season.

Although there is elevated uncertainty, we can begin to draw some conclusions:

- European gas and power prices are likely to remain elevated
- Increased importance will be placed on security of energy supply in Europe
- There is strategic value in domestic energy reserves and supplies, particularly green energy
- The energy transition in Europe is likely to be accelerated
- Investment in European energy infrastructure, including generation and storage, is likely to ramp-up even more rapidly to reduce reliance upon Russia

**FDE's portfolio incorporates gas, green power and heat generation, alongside rights to one of the largest undeveloped onshore gas resources in Western Europe. This portfolio has the potential to be positively impacted by recent trends.**

In this note we update our price forecasts and, in the context of heightened uncertainty, analyse the sensitivity of our valuations to a range of commodity price outlooks. We summarise our gas and power price forecasts in the table below; in the appendix we show these forecasts in chart form compared to current futures prices.

**Figure 1: Summary of key gas and power price forecasts**

	FY 20A	FY 21A	FY 22E	FY 23E	FY 24E	FY 25E	FY 26E	FY 27E	FY 28E	FY 29E	FY 30E
FR AMM FiT starting price <=1.5MW (EUR/MWh)	78.59	78.62	79.49	80.30	80.29	80.29	80.28	80.27	80.26	80.25	80.25
FR AMM FiT starting price >=4.8MW (EUR/MWh)	59.10	59.12	59.77	60.38	60.38	60.37	60.37	60.36	60.35	60.35	60.34
BE spot power price excl hedging (EUR/MWh)	33.1	47.6	183.1	187.9	154.4	133.4	126.7	101.0	75.3	62.7	63.4
FR gas price excl hedging (EUR/MWh)	10.62	14.17	75.32	77.66	60.67	46.06	45.36	35.68	26.00	20.36	20.36

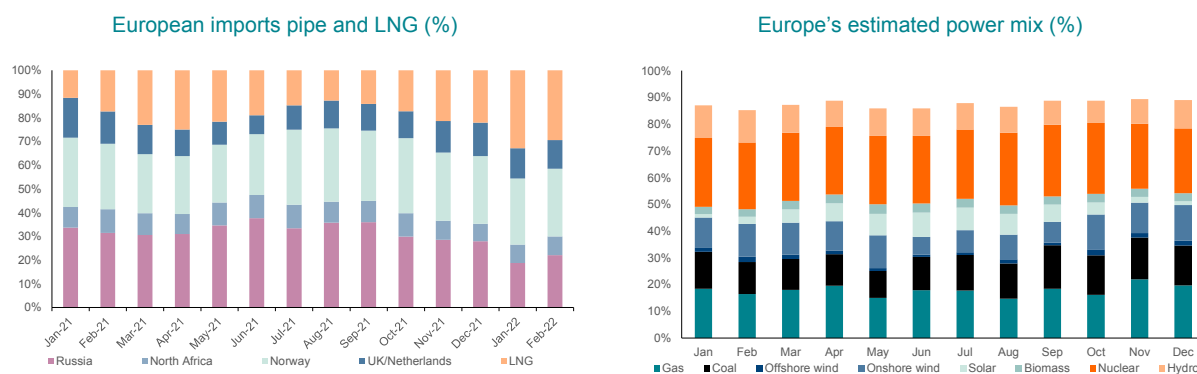
Source: BNP Paribas Exane estimates. Note FDE's green power generated in France is sold under a FiT, with the price realised dependent upon the scale of each installation.

### The gas market is also driving European power markets – key charts

The charts below provide an overview of our outlook for European and global gas markets. Even before recent price increases gas was the highest cost source of power generation in Europe, and we expect ongoing high gas prices to continue to underpin high European power prices.

**Figure 2: LNG compensates for reduced Russia supporting gas in a power mix that's little changed.**

As Russian imports have faltered LNG has played an increased role in import supply. Supporting power



Source: BNP Paribas Exane estimates

### LNG capacity growth is at the low point of the capital cycle

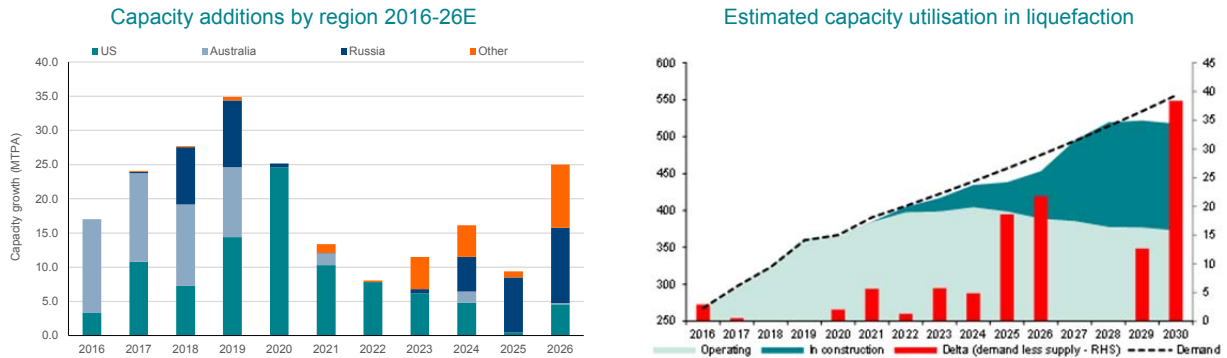
Plans (or perhaps ambitions may be a better word at this stage) to reduce European demand for Russian gas incorporate increased LNG purchases to fill a significant proportion of the shortfall. Unfortunately the below left chart shows that LNG liquefaction capacity growth is currently at the low point in the cycle, and Russian projects account for a significant proportion of future planned growth. These Russian projects look likely to be delayed.

The below right chart shows a significant shortfall in global LNG supply vs forecast demand growth, i.e. high LNG prices will be necessary to destroy some demand to match the available supply.

Simply put, planned liquefaction capacity additions are towards the low-end of the historic range in the near-term, and competition for LNG cargoes looks likely to remain high. Unfortunately Europe tends to buy LNG on the spot market, with only ~20% of historic volumes secured through long-term contracts, hence Europe is exposed to near-term strength in LNG prices.

**Figure 3: LNG is now at the low point of the capital cycle with asset utilisation also faltering on supply**

As the build cycle rolls the asset base is maturing and fields also appear to be seeing greater inefficiency



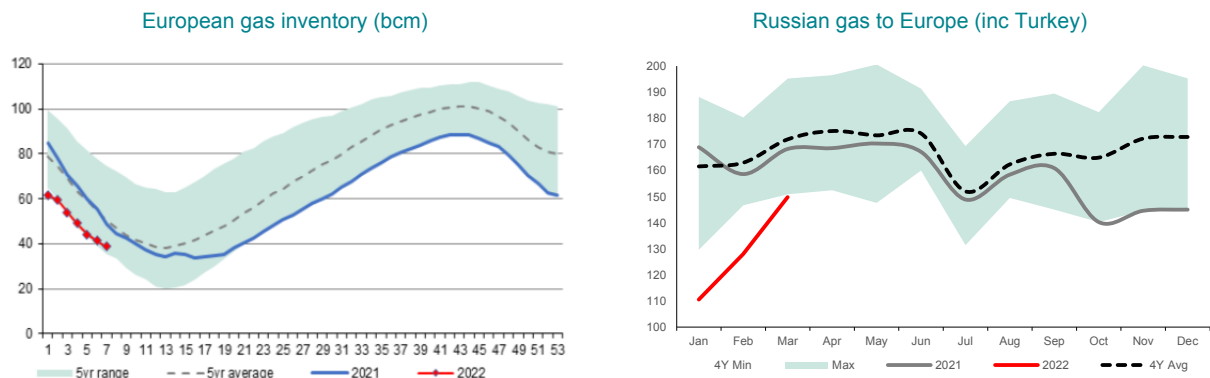
Source: BNP Paribas Exane estimates. Note estimates for future Russian capacity additions are included on the above chart, however, these are likely to be delayed.

**We forecast European gas demand needs to fall ~10%, even if Russia meets its contractual supply commitments**

If Russia continues to supply Europe in-line with its contractual commitments (which sit ~28bcm below 2021 actual supply levels on our estimates) and Europe seeks to rebuild inventories to 90% of available capacity (which requires a ~20bcm injection on our estimates) we estimate broader European demand (including Turkey and the UK) would need to fall >10% this year (~58bcm).

**Figure 4: Euro storage – better than feared and aided by recovering Russian supply**

European inventories remain at 5-year lows whilst Russia continues to supply under contract but not beyond

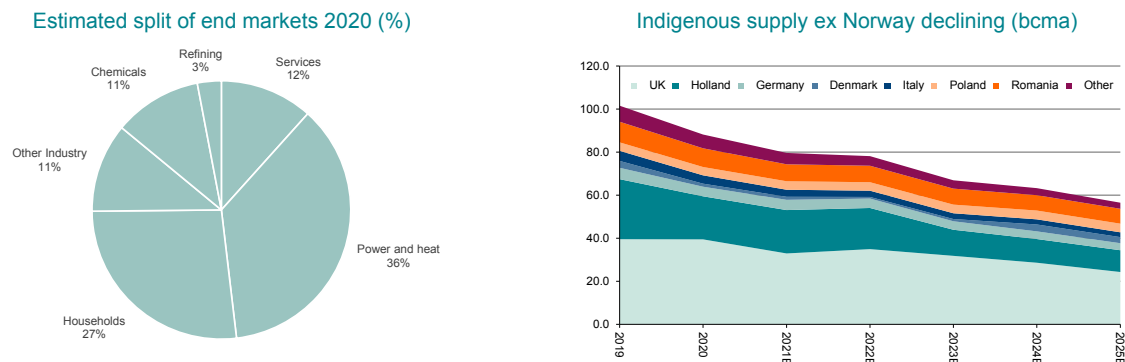


Source: BNP Paribas Exane estimates

Within these estimates we model domestic European gas supply declining ~6bcm in 2022, non-European pipeline supply increasing ~3bcm, and that 2021 gas supplied to the market benefited from a ~16bcm draw-down in European storage inventories. We model a ~8bcm increase in net European LNG imports in 2022, a ~7% increase versus 2021.

## Figure 5: Russia and LNG aside the supply picture offers little by way of upside

Source of pipeline supply – North Africa and Indigenous ex Norway



Source: BNP Paribas Exane estimates; Bloomberg

### **What options does Europe have to access additional gas supply**

In the short term Europe could purchase even larger volumes of LNG versus our forecasts at market prices, but in a tight global LNG market this would have an upwards impact on prices (and if passed through, demand). There is also the potential for a supply side response from the Groningen field in the Netherlands; an initial commitment has been made to increase supply by ~4bcm in 2022 which could potentially be extended for more than one year. High near-term gas prices are also likely to result in increased investment to maintain and sustain production, reducing near-term decline rates and potentially accounting for an additional ~5-7bcm of supply.

In the longer-term European gas demand could, potentially, underpin additional expansion of LNG liquefaction capacity. This is not without challenges, however, given new LNG facilities require 20+-year demand and pricing visibility and progress towards Net Zero 2050 will require reduced gas consumption within that timeframe.

If Russian gas supply to Europe were to fall below existing contractual commitments, either driven by the producer or customers, the impact would clearly be greater.

### **EU proposes to reduce gas demand by 2/3 by YE 2022, but some assumptions appear optimistic**

The table below provides an overview of the EU's proposal to reduce European gas dependence by 2/3 by the end of 2022. We contrast this with estimates made by our ESG colleagues who presented an alternative zero Russian gas scenario. Note that these scenarios include a significant contribution from colder homes/foregone power, which could cause genuine human suffering. Our zero Russian gas scenario also incorporates a significant reduction in industrial demand. Our ESG team believes the EU's near-term scenario for incremental frontloading of solar and wind generation look wildly optimistic given this is intended to be achievable by year-end 2022.

### Figure 6: Scenarios for cutting European use of Russian gas

The EUs scenarios Vs. BNPPE ESG's ambitious scenarios

Cutting Russian gas use	Commission scenario	% of Russian gas	Zero Russian gas scenario	% of Russian gas
Additional LNG	50	32%	40	26%
Additional pipeline gas	10	6%	10	6%
Renewable gas	3.5	2%	3.5	2%
Solar rooftop frontloading	2.5	2%	1.5	1%
Other wind and solar frontloading	20	13%	5	3%
Run coal stations harder			25	16%
Run nuclear harder			10	6%
Additional bioenergy generation			5	3%
Heat pump frontloading	1.5	1%	1	1%
Household efficiency	4	3%	4	3%
Colder homes and foregone power	10	6%	17	11%
Lower industrial gas, heat, power use			33	21%
	<b>101.5</b>	<b>65%</b>	<b>155</b>	<b>100%</b>

Source: European Commission, BNP Paribas Exane estimates

## Valuation range increased ~34% at the mid-point

The table below summarises the impact of our revised forecasts on our risked NAV. We increase our valuation range to EUR42-61/sh from EUR31-46/sh, a 34% increase at the mid-point. Our valuation range implies 3-50% upside versus the current share price.

**Figure 7: Summary of changes to risked NAV**

	Previous		Current		Change	
	EUR/sh	%	EUR/sh	%	EUR/sh	%
Core Producing NAV excl financials	27.9	61%	35.8	59%	7.9	28%
Financials	(13.6)	-30%	(13.5)	-22%	0.1	-1%
Operating sites NAV	14.3	31%	22.3	37%	8.0	56%
Development projects NAV	16.8	37%	19.3	32%	2.5	15%
Core NAV - 2022 expansion plan	31.1	68%	41.6	68%	10.6	34%
Future sites 2023+ backed by 2P reserves - CHPs	14.4	32%	19.3	32%	4.9	34%
Future projects NAV	45.5	100%	61.0	100%	15.5	34%

Source: BNP Paribas Exane estimates

We model and value green energy companies using a Risked Net Asset Value (Risked NAV) approach, capturing the growth plans for the business.

### **NAV of projects on-line by calendar year-end 2022 underpins low end of range**

The low end of our valuation range is set equal to our risked Core NAV of the projects currently in production plus a risked assessment of the current expansion program to calendar year-end 2022.

### **NAV of modelled expansion to 2025 bounds top-end of range**

The upper end of the range incorporates risked value for new CHP sites to utilise the existing 2P reserves and the potential CBM development project. Extension of the CHP installation program beyond our current assumptions of 70 CHP units by 2025 would be additive to our valuation.

### **Detailed NAV breakdown**

The chart below provides a visual overview of our risked NAV. As can be clearly seen the shares trade at a small discount to our risked NAV for the operating assets and development projects. Future development projects offer potential further upside to the current share price.

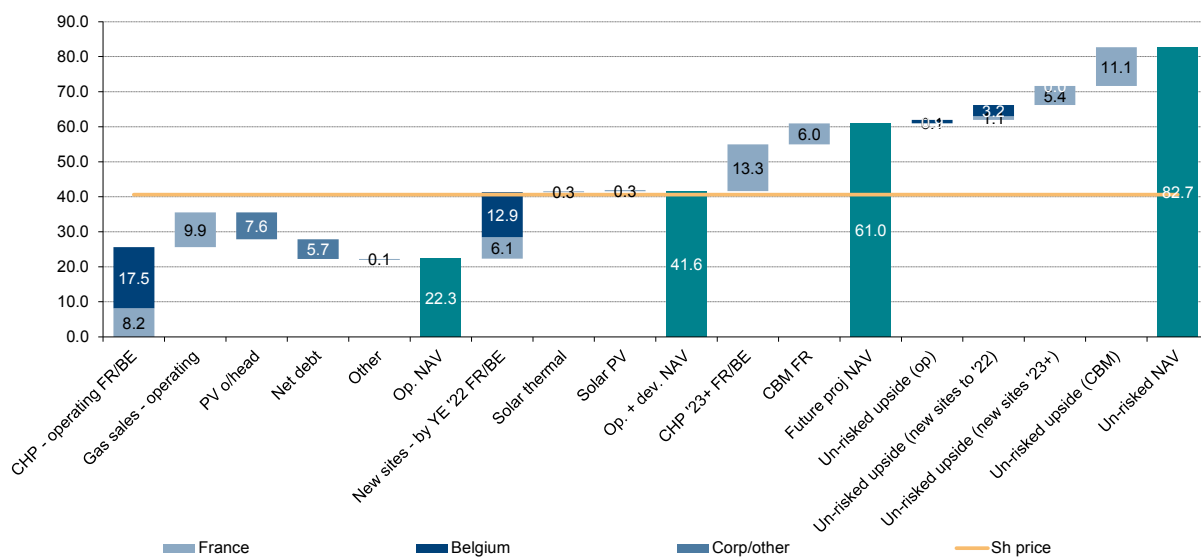
FDE is trading at a discount to our EUR 41.6/sh 'Core NAV – 2022 expansion plan', our NAV for the planned CHP expansion to calendar YE 2022.

Our EUR61.0/sh Future Projects NAV, which offers ~50% upside, incorporates only ~3 years of risked development pipeline, to FY 25.



**Figure 8: Current share price underpinned by Operating and Development NAV, with substantial upside potential through future projects**

Risked NAV waterfall chart (EUR/sh)



Source: BNP Paribas Exane estimates

The table below provides a more detailed overview of our risked NAV by project.

Figure 9: Risked NAV – detail

Country	Field	No. CHPs (w here appropriate)	Capacity installed (MW)	Gross res (mmboe CH4)	Int. %	W.I. Res., mboe	CoS (%)	NAV@ 5.3% for CHP/solar and 10.0% for gas sales/CBM; as of 1st Jan					
								EURm	EURm /MW	EUR/WI boe	EUR/sh	Unrisked EUR/sh	
<b>Operating sites - CHPs</b>													
France	8 installed CHPs	6	9	1.9	100%	1.9	100%	33	3.7	17.7	6.5	6.5	
Belgium	Anderlues-BE - incl accum. green certs	7	10.5	2.1	100%	2.1	95%	90	9.1	44.6	17.5	18.4	
France	Bethune-FR	2	2.7	0.6	100%	0.6	100%	9	3.2	15.4	1.7	1.7	
<b>Operating sites - Gas sales</b>													
France	Gas sold to grid/Dalkia	n/a	n/a	4.6	100%	4.6	100%	51	n/a	11.2	9.9	9.9	
<b>Development projects - Solar thermal</b>													
France	Cellcius/Creutzwald	n/a	n/a	n/a	100%		80%	1	n/a	n/a	0.3	0.3	
<b>Total operating sites</b>		<b>15</b>	<b>22.2</b>	<b>9.2</b>		<b>9.2</b>		<b>185</b>			<b>35.8</b>	<b>36.8</b>	
NPV of overheads (20yrs, post tax)								-40			(7.6)	(7.6)	
Net cash (debt) excl restricted cash								-29			(5.7)	(5.7)	
Impact of consolidated tax calc								1			0.1	0.1	
Decomm not included in project models								-1			(0.3)	(0.3)	
Cash return completed post B/S date								0			0.0	0.0	
Proceeds from disposals/acqn costs								0		100%	0.0	0.0	
Est'd exploration expenditure incurred post B/S date								0			0.0	0.0	
Other costs								0			0.0	0.0	
<b>Operating sites NAV</b>		<b>15</b>	<b>22.2</b>	<b>9.2</b>		<b>9.2</b>		<b>115</b>			<b>22.3</b>	<b>23.3</b>	
<b>Sites modelled by YE '22 - CHPs</b>													
France	Avion 2-FR	2	3	0.6	100%	0.6	100%	12	3.8	18.3	2.2	2.2	
Belgium	Greenhill-BE	6	9	1.8	100%	1.8	80%	67	9.2	45.0	12.9	16.1	
France	New site 1-FR	4	6	1.2	100%	1.2	80%	10	2.1	10.4	1.9	2.4	
France	New site 2-FR	4	6	1.2	100%	1.2	80%	10	2.1	10.4	1.9	2.4	
<b>Development projects - Solar PV</b>													
France	Tritteling	n/a	14.92	n/a	100%		80%	2	0.1	n/a	0.3	0.4	
<b>Total development</b>		<b>16</b>	<b>38.9</b>	<b>4.9</b>		<b>4.9</b>		<b>100</b>	<b>0.0</b>		<b>19.3</b>	<b>23.6</b>	
<b>Core NAV - 2022 expansion plan</b>		<b>31</b>	<b>61.1</b>	<b>14.0</b>		<b>14.0</b>		<b>215</b>			<b>41.6</b>	<b>46.9</b>	
<b>Future sites 2023+ backed by 2P reserves - CHPs</b>													
France	New site 3-FR	4	6	1.2	100%	1.2	80%	9	1.9	9.9	1.8	2.2	
France	New site 4-FR	4	6	1.2	100%	1.2	70%	8	1.9	9.9	1.6	2.2	
France	New site 5-FR	4	6	1.1	100%	1.1	70%	7	1.7	9.0	1.4	2.0	
France	New site 6-FR	4	6	1.1	100%	1.1	70%	8	1.9	10.2	1.6	2.2	
France	New site 7-FR	3	4.5	0.8	100%	0.8	70%	5	1.7	9.2	1.0	1.5	
France	New site 8-FR	4	6	1.1	100%	1.1	70%	7	1.6	8.5	1.3	1.8	
France	New site 9-FR	4	6	1.1	100%	1.1	70%	6	1.5	8.5	1.2	1.8	
France	New site 10-FR	4	6	1.1	100%	1.1	70%	6	1.4	8.2	1.2	1.7	
France	New site 11-FR	4	6	1.1	100%	1.1	70%	6	1.5	8.2	1.2	1.7	
France	New site 12-FR	4	6	1.0	100%	1.0	70%	6	1.4	8.2	1.1	1.6	
<b>Future projects - CBM</b>													
France	Lorraine CBM			23.3	100%	23.34	35%	31		3.8	6.0	17.1	
<b>Total future projects</b>		<b>39</b>	<b>58.5</b>	<b>34.1</b>		<b>34.1</b>		<b>100</b>	<b>12.2</b>		<b>19.3</b>	<b>35.8</b>	
<b>Future projects NAV</b>		<b>70</b>	<b>119.6</b>	<b>48.1</b>		<b>48.1</b>		<b>315</b>			<b>61.0</b>	<b>82.7</b>	
Share price											40.6	40.6	
Operating sites NAV up/(down)side vs share price											(45%)	16%	
Core NAV - 2022 expansion plan up/(down)side vs share price											3%	104%	
Future projects NAV up/(down)side vs share price											50%	104%	

Source: BNP Paribas Exane estimates

### Breaking down the sensitivities across the portfolio

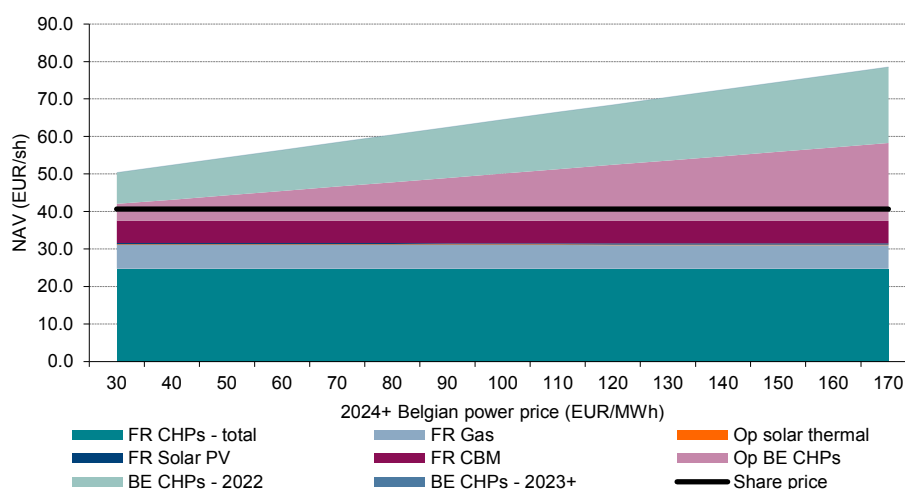
FDE's near-term price exposure is to Belgian power prices and French gas prices. The business has exposure to long-term French power prices, but these only impact the business once the FIT (Feed-in-Tariff) expires after 10-15 years.

### Belgian power price exposure – Belgian CHPs

Power produced using CHP (Combined Heat and Power) units fed by abandoned mine methane (AMM) in Belgium is sold at market prices, although FDE does hedge a portion of its exposure. Our risked NAV for the Belgian CHP business is, therefore, leveraged to Belgian power prices. The power generated is also eligible to receive Green Certificates, which we model at the Belgian government guaranteed price, which is independent of prevailing power prices. The business therefore has a revenue element that is exposed to merchant power prices, and one that is independent of power prices.

As can be seen below we calculate a risked NAV for the Belgian CHPs ranging from ~EUR13/sh at a long-term power price of EUR30/MWh, to ~EUR41/sh at a long-term power price of EUR170/MWh.

**Figure 10: Risked NAV sensitivity to Belgian power price (EUR/MWh)**



Source: BNP Paribas Exane estimates. Note we have allocated the non-asset specific items in our Operating Sites NAV (the balance sheet, overheads etc) across the producing assets in these sensitivity charts.

### French gas prices – AMM gas sales and CBM

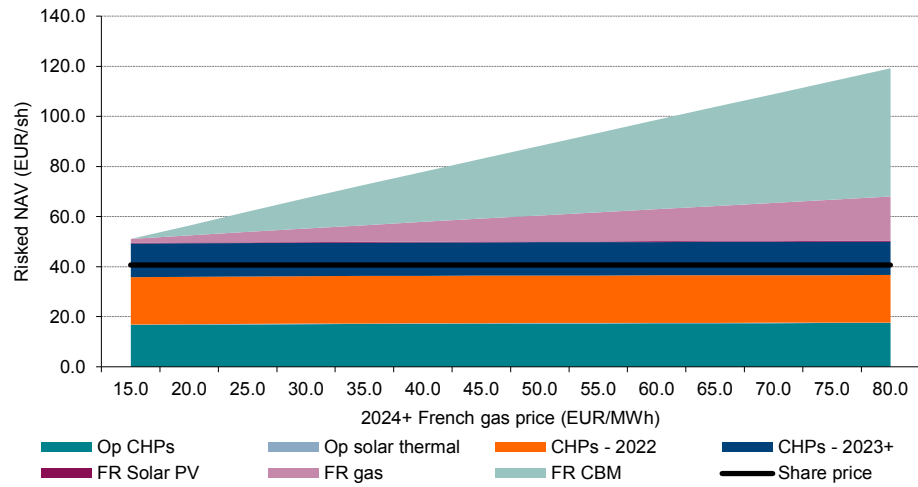
The portion of gas recovered from abandoned mines and sold directly to the grid in France is sold at market prices, although FDE does hedge a portion of its exposure. Our risked NAV for the French gas business is, therefore, leveraged to prevailing French gas prices.

The economics of the undeveloped CBM resource is also leveraged to long-term French gas price expectations since we model this being developed as natural gas. Options are being studied for the low-carbon emissions conversion of this gas resource to hydrogen, which would clearly change the price sensitivity to that commodity.

As can be seen below we calculate a risked NAV for the French AMM gas sales business ranging from ~EUR1.5/sh at a long-term gas price of EUR15/MWh, to ~EUR18/sh at a long-term gas price of EUR80/MWh.

We calculate a risked NAV for the CBM development of up to ~EUR51/sh at a long-term French gas price of EUR80/MWh.

**Figure 11: Risked NAV sensitivity to French gas price (EUR/MWh)**



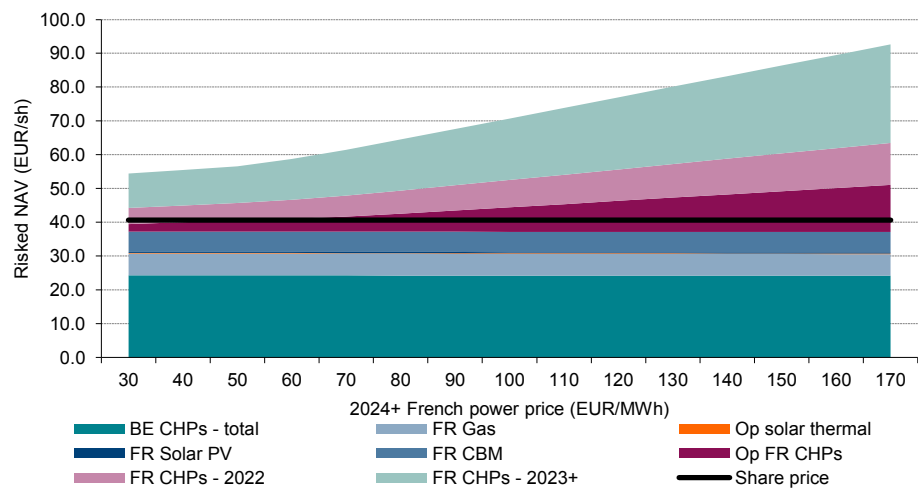
Source: BNP Paribas Exane estimates. Note we have allocated the non-asset specific items in our Operating Sites NAV (the balance sheet, overheads etc) across the producing assets in these sensitivity charts.

**French power prices – CHPs post expiry of FiT**

Power produced using CHP (Combined Heat and Power) units fed by abandoned mine methane (AMM) in France is sold under a Feed-In-Tariff arrangement which essentially fixes prices for 10 to 15 years. The power price in the last 5 years of the FiT is dependent upon utilisation rates during the first 10 years. To the extent that longer-term gas prices exceed the FiT the French CHP business is leveraged to long-term French power price.

As can be seen below we calculate a risked NAV for the French CHPs ranging from ~EUR17/sh at a long-term French power price of EUR30/MWh, to ~EUR55/sh at a long-term power price of EUR170/MWh.

**Figure 12: Risked NAV sensitivity to French power price (EUR/MWh)**



Source: BNP Paribas Exane estimates. Note we have allocated the non-asset specific items in our Operating Sites NAV (the balance sheet, overheads etc) across the producing assets in these sensitivity charts.



Figure 14: Risked NAV sensitivity to French power prices - detail

Country	Field	No. CHPs (where appropriate)	Capacity installed (MW)	W.L Res. mboe	CoS (%)	NAV@ 5.3% for CHPsolar and 10.0% for gas sales/CBM, as of 1st Jan																
						Base	FR power P €30/MWh	FR power P €40/MWh	FR power P €50/MWh	FR power P €60/MWh	FR power P €70/MWh	FR power P €80/MWh	FR power P €90/MWh	FR power P €100/MWh	FR power P €110/MWh	FR power P €120/MWh	FR power P €130/MWh	FR power P €140/MWh	FR power P €150/MWh	FR power P €160/MWh	FR power P €170/MWh	
<b>Operating sites - CHPs</b>																						
France	8 installed CHPs	6	9	1.89	100%	6.5	4.7	5.1	5.6	6.1	6.6	7.4	8.1	8.9	9.7	10.5	11.3	12.1	12.9	13.7	14.5	
Belgium	Anderlues-BE - Incl accum. green certs	7	10.5	2.13	95%	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	
France	Bethune-FR	2	2.7	0.57	100%	1.7	1.4	1.5	1.5	1.6	1.7	1.9	2.1	2.2	2.4	2.6	2.7	2.9	3.1	3.2	3.4	
<b>Operating sites - Gas sales</b>																						
France	Gas sold to grid/Dalkia	n/a	n/a	4.57	100%	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	
<b>Development projects - Solar thermal</b>																						
France	Celcius/Creutzwald	n/a	n/a	0.0	1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	
<b>Total operating sites</b>						<b>35.6</b>	<b>33.7</b>	<b>34.2</b>	<b>34.8</b>	<b>35.3</b>	<b>36.0</b>	<b>36.9</b>	<b>37.8</b>	<b>38.8</b>	<b>39.8</b>	<b>40.7</b>	<b>41.7</b>	<b>42.7</b>	<b>43.6</b>	<b>44.6</b>	<b>45.5</b>	
NPV of overheads (20yrs. post tax)						(7.6)	(7.6)	(7.6)	(7.6)	(7.6)	(7.7)	(7.7)	(7.7)	(7.7)	(7.7)	(7.8)	(7.8)	(7.8)	(7.8)	(7.8)	(7.8)	
Net cash (debt) excl restricted cash						(5.7)	(5.7)	(5.7)	(5.7)	(5.7)	(5.7)	(5.7)	(5.7)	(5.7)	(5.7)	(5.7)	(5.7)	(5.7)	(5.7)	(5.7)	(5.7)	
Impact of consolidated tax calc						0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
Decommt not included in project models						(0.3)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)	
Cash return completed post B/S date						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Proceeds from disposals/acqn costs						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Esfd exploration expenditure incurred post B/S date						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Other costs						0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
<b>Operating sites NAV</b>						<b>22.3</b>	<b>20.3</b>	<b>20.8</b>	<b>21.3</b>	<b>21.9</b>	<b>22.5</b>	<b>23.4</b>	<b>24.3</b>	<b>25.3</b>	<b>26.2</b>	<b>27.2</b>	<b>28.1</b>	<b>29.1</b>	<b>30.0</b>	<b>31.0</b>	<b>31.9</b>	
<b>Sites modelled by YE '22 - CHPs</b>																						
France	Avion 2-FR	2	3	0.6	1	2.2	1.9	2.0	2.1	2.1	2.2	2.4	2.6	2.7	2.9	3.1	3.2	3.4	3.6	3.7	3.9	
Belgium	Greenhill-BE	6	9	1.8	1	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	12.9	
France	New site 1-FR	4	6	1.2	1	1.9	1.4	1.5	1.6	1.7	2.0	2.2	2.4	2.7	2.9	3.1	3.4	3.6	3.8	4.0	4.3	
France	New site 2-FR	4	6	1.2	1	1.9	1.4	1.5	1.6	1.7	2.0	2.2	2.4	2.7	2.9	3.1	3.4	3.6	3.8	4.0	4.3	
<b>Development projects - Solar PV</b>																						
France	Tritheling	n/a	14.92	0.0	1	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3		
<b>Total development</b>						<b>19.3</b>	<b>18.0</b>	<b>18.2</b>	<b>18.4</b>	<b>18.8</b>	<b>19.4</b>	<b>20.0</b>	<b>20.6</b>	<b>21.3</b>	<b>21.9</b>	<b>22.5</b>	<b>23.1</b>	<b>23.8</b>	<b>24.4</b>	<b>25.0</b>	<b>25.6</b>	
<b>Core NAV - 2022 expansion plan</b>						<b>41.6</b>	<b>38.3</b>	<b>39.0</b>	<b>39.7</b>	<b>40.7</b>	<b>41.9</b>	<b>43.4</b>	<b>45.0</b>	<b>46.5</b>	<b>48.1</b>	<b>49.7</b>	<b>51.2</b>	<b>52.8</b>	<b>54.4</b>	<b>56.0</b>	<b>57.5</b>	
<b>Future sites 2023+ backed by 2P reserves - CHPs</b>																						
France	New site 3-FR	4	6	1.2	1	1.8	1.3	1.4	1.4	1.6	1.8	2.0	2.2	2.5	2.7	2.9	3.1	3.3	3.5	3.7	3.9	
France	New site 4-FR	4	6	1.2	1	1.6	1.1	1.2	1.3	1.4	1.6	1.8	2.0	2.1	2.3	2.5	2.7	2.9	3.1	3.3	3.4	
France	New site 5-FR	4	6	1.1	1	1.4	1.0	1.0	1.1	1.2	1.4	1.6	1.7	1.9	2.1	2.3	2.4	2.6	2.8	2.9	3.1	
France	New site 6-FR	4	6	1.1	1	1.6	1.4	1.4	1.5	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.3	2.4	2.5	2.6	2.7	
France	New site 7-FR	3	4.5	0.8	1	1.0	0.8	0.8	0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.7	1.8	2.0	2.1	2.2	2.3	
France	New site 8-FR	4	6	1.1	1	1.3	0.9	1.0	1.0	1.1	1.3	1.4	1.6	1.8	1.9	2.1	2.2	2.4	2.5	2.7	2.9	
France	New site 9-FR	4	6	1.1	1	1.2	0.9	1.0	1.0	1.1	1.3	1.4	1.6	1.7	1.9	2.1	2.2	2.4	2.5	2.7	2.8	
France	New site 10-FR	4	6	1.1	1	1.2	0.9	0.9	0.9	1.0	1.2	1.3	1.5	1.6	1.8	1.9	2.0	2.2	2.3	2.5	2.6	
France	New site 11-FR	4	6	1.1	1	1.2	0.9	0.9	0.9	1.1	1.2	1.3	1.5	1.6	1.8	1.9	2.1	2.2	2.3	2.5	2.6	
France	New site 12-FR	4	6	1.0	1	1.1	0.9	0.9	0.9	1.0	1.2	1.3	1.5	1.6	1.7	1.9	2.0	2.2	2.3	2.5	2.6	
<b>Future projects - CBM</b>																						
France	Lorraine CBM	0	0	23.3	0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		
<b>Total future projects</b>						<b>19.3</b>	<b>16.1</b>	<b>16.5</b>	<b>16.9</b>	<b>18.0</b>	<b>19.5</b>	<b>21.1</b>	<b>22.6</b>	<b>24.2</b>	<b>25.8</b>	<b>27.3</b>	<b>28.9</b>	<b>30.4</b>	<b>32.0</b>	<b>33.5</b>	<b>35.1</b>	
<b>Future projects NAV</b>						<b>61.0</b>	<b>54.4</b>	<b>55.5</b>	<b>56.6</b>	<b>58.7</b>	<b>61.4</b>	<b>64.5</b>	<b>67.6</b>	<b>70.7</b>	<b>73.9</b>	<b>77.0</b>	<b>80.1</b>	<b>83.2</b>	<b>86.4</b>	<b>89.5</b>	<b>92.6</b>	
<b>Share price</b>						<b>40.6</b>	<b>40.6</b>	<b>40.6</b>	<b>40.6</b>	<b>40.6</b>	<b>40.6</b>	<b>40.6</b>	<b>40.6</b>	<b>40.6</b>	<b>40.6</b>	<b>40.6</b>	<b>40.6</b>	<b>40.6</b>	<b>40.6</b>	<b>40.6</b>	<b>40.6</b>	
Core NAV up/(down)side vs share price						3%	(5%)	(4%)	(2%)	0%	3%	7%	11%	15%	19%	22%	26%	30%	34%	38%	42%	
Central NAV up/(down)side vs share price						50%	34%	37%	39%	45%	51%	59%	67%	74%	82%	90%	97%	105%	113%	120%	128%	
Upside NAV up/(down)side vs share price						50%	34%	37%	39%	45%	51%	59%	67%	74%	82%	90%	97%	105%	113%	120%	128%	

Source: BNP Paribas Exane estimates



# Business Review – High Returns European Green Energy Generation

## **FDE generates green power whilst reducing methane emissions**

FDE recovers gas from abandoned coal mines (Abandoned Mine Methane or AMM), selling a portion of this gas into the French gas grid and using the remainder to generate green power in France and Belgium. If this gas was not recovered from the abandoned mines it would eventually leak naturally to the atmosphere, causing global warming. FDE's activities commence after the abandonment of the mine; FDE is not involved in the production of coal and there is no coal production associated with FDE's activities.

## ***Methane is significantly more damaging to the environment than CO2***

The methane molecule has a global warming potential (GWP) significantly higher than (82.5x) that of CO<sub>2</sub> over 20 years (methane molecules have a 12-year life in the earth's atmosphere). Cutting methane emissions is, according to the Executive Director of the UN Environment Programme (UNEP), the "strongest lever we have to slow climate change over the next 25 years".

The capture and utilisation of gas from abandoned mines was recently classified by Greenfin France as an activity contributing to the energy and ecological transition. According to the Hauts de France regional authorities FDE is already the largest contributor to the CO<sub>2</sub>eq emissions reduction initiative in Northern France.

## **Benefitting from strength in European power and gas prices**

FDE sells green power in Europe at both fixed and market prices, and sells gas (collected from abandoned mines) at market prices. Consequently, the business is exposed to the strength in European gas and power prices, whilst also enjoying a degree of stability and downside protection from fixed pricing.

FDE hedges a portion of its market exposure, which we believe is likely to limit its leverage to market prices, particularly rapid increases in near-term prices.

## **Increased base-case cash generation forecasts**

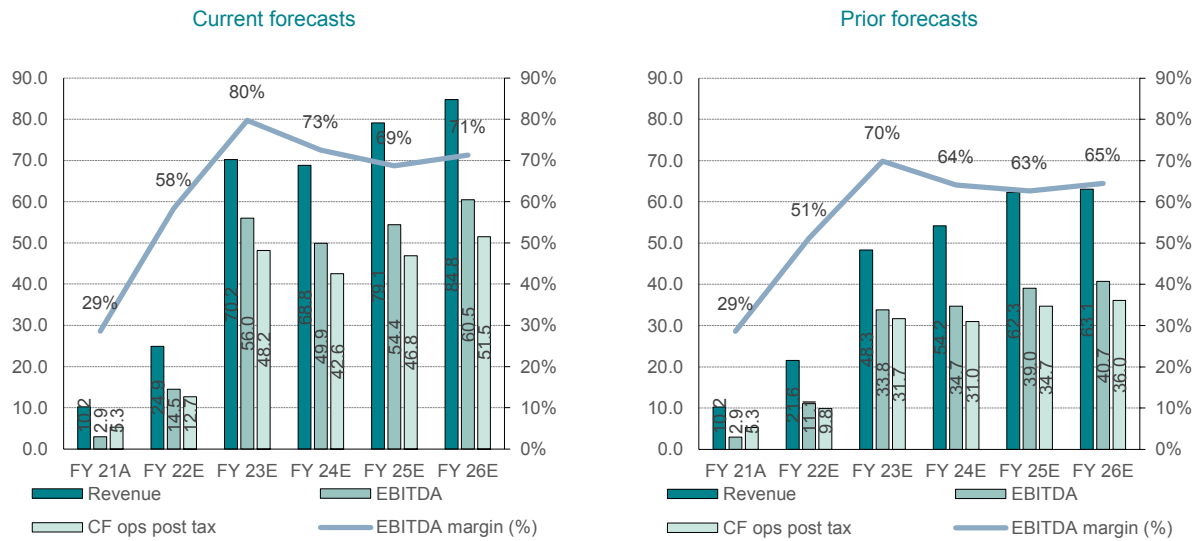
We summarise below our revised forecasts for the business, reflecting our revised price deck.

Under our revised gas and power price assumptions our operating cash-flow forecasts increase by ~40% in the longer term (FY 2024-26)



**Figure 16: Improved cash generation outlook**

Revenue, EBITDA and operating cash-flow forecasts (post tax)



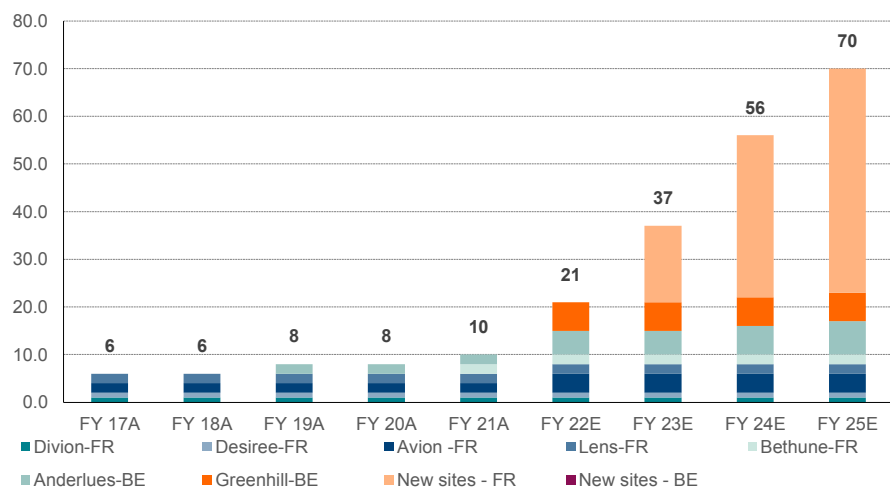
Source: Company, BNP Paribas Exane estimates. Note we incorporate receipt of Belgian Green Certificates from 2023 in our forecasts.

**CHP expansion driving volume and revenue growth**

The charts below summarise our outlook for the business. Our forecast growth is driven by the expansion of the CHP business in France and Belgium. We incorporate expansion of the CHP program to a total of 70 units in our forecasts, vs 61 previously, driven by the reserves increase recorded in France.

**Figure 17: 33 CHP units targeted for installation by calendar YE 2022, up from 15 units today, with further expansion targeted**

CHP units installed – by site

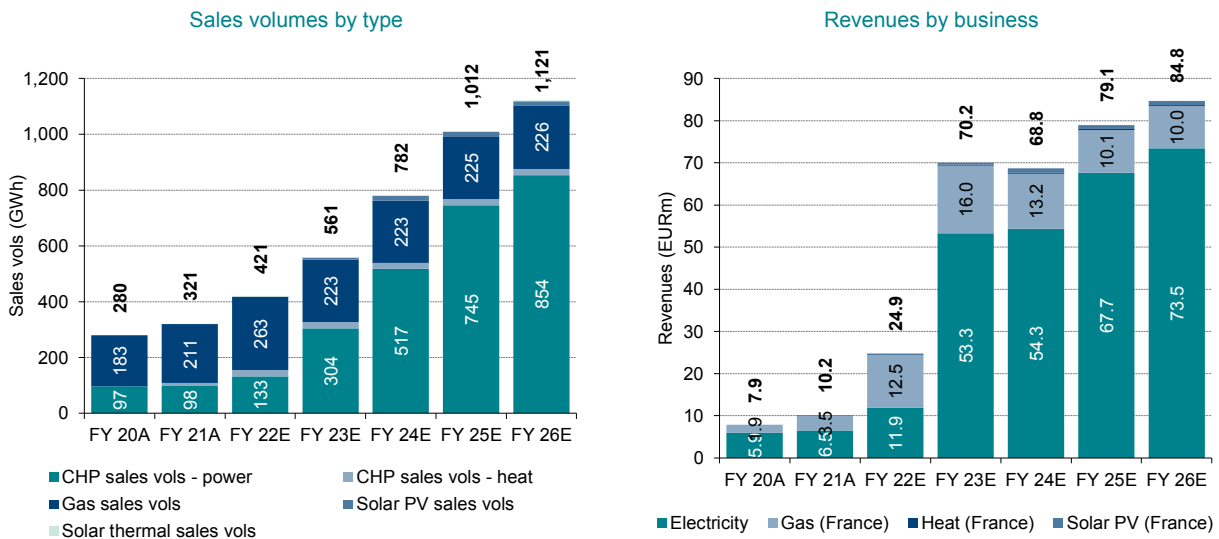


Source: BNP Paribas Exane estimates

This growth in the installed base drives a 3.1x increase in sales volumes by FY 25 vs FY 21.

Volume growth translates into a substantial revenue growth of 67% pa FY21-25 with a significant step-up in FY 2023. We have assumed a degree of hedging during CY22 (to FY H2 22/H1 23) resulting in realised prices below our forecasts for market prices. We do not incorporate hedging assumptions for FY H2 2023 onwards in our forecasts, resulting in an increase in effective realised prices FY 23 vs FY 22. As noted previously we do not have visibility on current hedging, and look for an update at the FY H1 22 results.

**Figure 18: CHP expansion driving >3x vol growth FY21-25; translating into 67% pa CAGR in revs FY21-25**



Source: Company, BNP Paribas Exane estimates

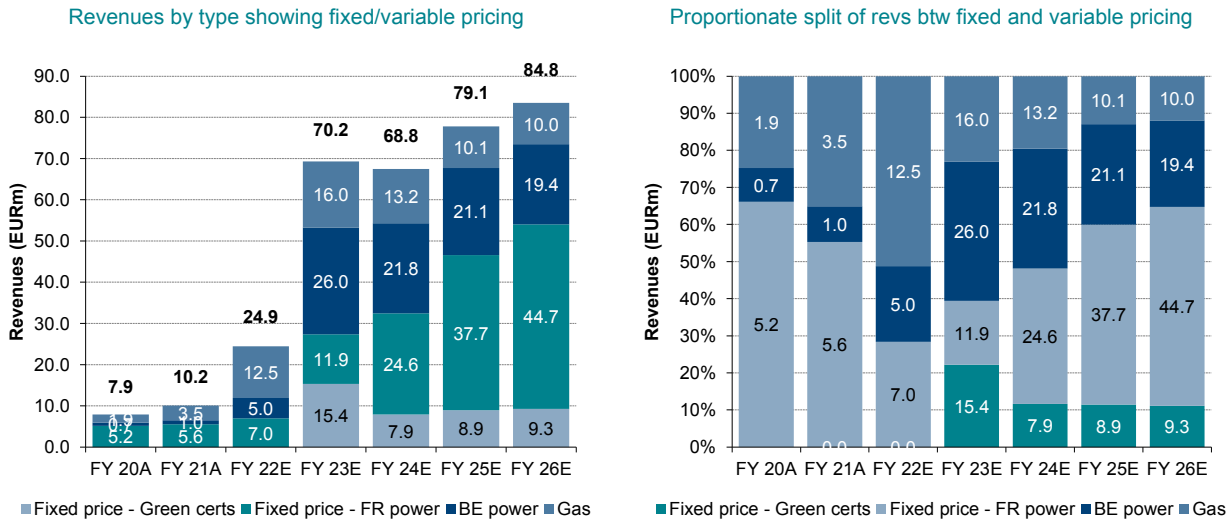
The charts below show how the split of our revenue forecast between project type, identifying revenues impacted by market prices and those linked to fixed prices.

For FY 22 revenues are, unsurprisingly, dominated by market pricing.

We forecast an increased contribution from fixed prices in FY 23, however, this is driven by our assumption that cash payments for all Belgian green certificates which have been earned since power generation commenced are received in FY H2 23. To date FDE has not received the green certificates to which it is entitled, and we do not have visibility on the likely timing of receipt. If payments for green certificates are received we believe ~40% of revenues in FY 2023 could be related to fixed pricing, if payments for green certificates are not received only ~20% of our revenue forecast would be related to fixed prices.

From FY 24 we forecast fixed priced French power and Belgian green certificates will contribute around half of total revenues, rising further in FY 25/26.

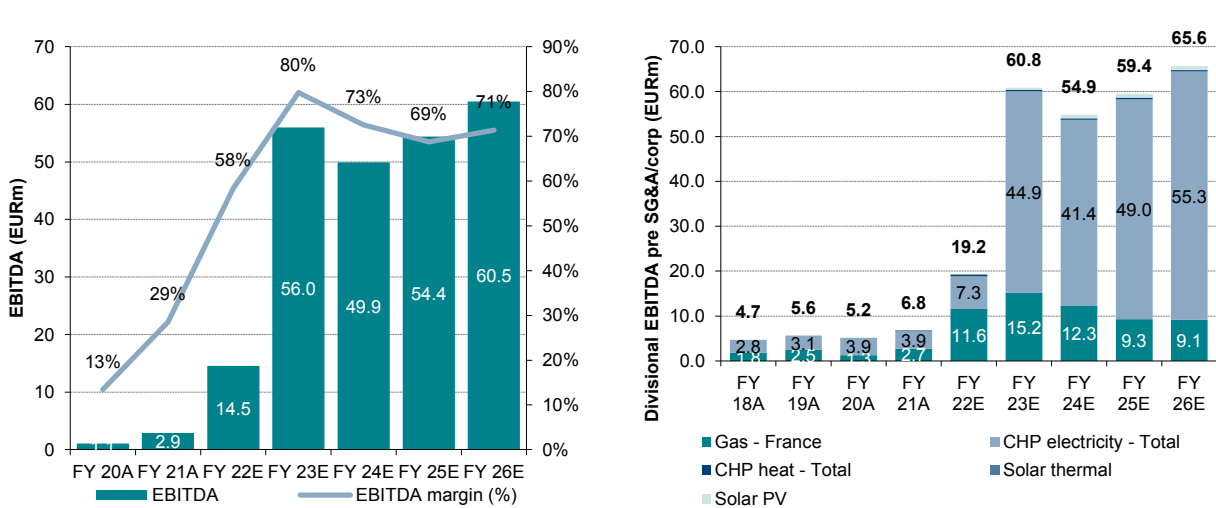
**Figure 19: ~Half of revs are at fixed prices from FY24, FR power sales account for ~half of revs by FY 25/26. In the near-term variable prices dominate**



Source: Company, BNP Paribas Exane estimates

The anticipated capacity expansion drives rapid growth in forecast EBITDA, particularly from FY 23 reflecting the revenue growth/hedging points raised earlier. As can be seen in the divisional EBITDA chart (pre-SG&A) the CHP expansion is the primary driver of our EBITDA growth on our forecasts, with gas sales contributing ~15% in FY 25/26.

**Figure 20: The planned capacity expansion should drive rapid growth in EBITDA, primarily from CHP power**



Source: Company, BNP Paribas Exane estimates

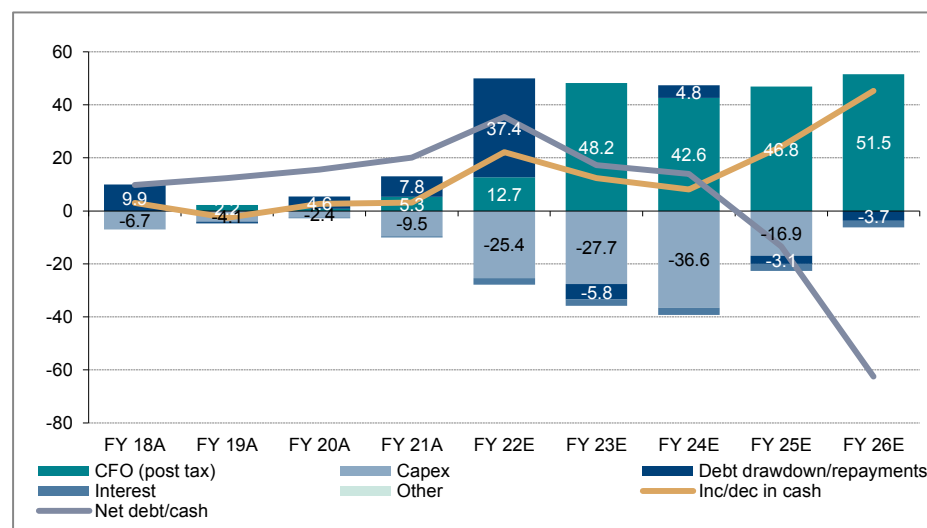
### Funding position more than adequate

FDE issued EUR25m of Green Bonds during FY 22, which in addition to a number of project specific finance instruments, provides more than sufficient liquidity to execute our modelled development program.

At our revised price deck we forecast rapid debt pay-down, with the potential to return to a debt neutral position during FY 25. We believe management wishes to continue expanding the business beyond our current forecasts, subject to securing suitable sites. Management intends to expand the solar PV portfolio to 100W and M&A opportunities could provide additional growth. Capital could therefore be reinvested to fund continued expansion of the business, growing the installed asset base, reducing CO<sub>2</sub>-equivalent emissions and profitably supplying clean energy to Europe.

**Figure 21: Comfortable funding position with ability to rapidly pay-down debt**

Cash flow forecast summary chart and net debt (EURm)



Source: BNP Paribas Exane estimates

The table below summarises our financial forecasts at our base case, reflecting the expected rapid growth of the business.

**Figure 22: Financial forecast summary**

EURm, unless otherwise noted

	FY 20A	FY 21A	FY 22E	FY 23E	FY 24E	FY 25E	FY 26E
CHP capacity installed - power (MW)	12.0	14.7	31.2	43.2	70.2	98.7	104.7
Solar PV installed capacity (MW)	0.0	0.0	0.0	14.9	14.9	14.9	14.9
Revenue	7.9	10.2	24.9	70.2	68.8	79.1	84.8
Electricity	5.9	6.5	11.9	53.3	54.3	67.7	73.5
Gas (France)	1.9	3.5	12.5	16.0	13.2	10.1	10.0
Heat (France)	0.0	0.1	0.3	0.3	0.3	0.3	0.3
Solar thermal (France)	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Solar PV (France)	0.0	0.0	0.0	0.5	0.9	0.9	0.9
Fixed price revenues	5.2	5.7	7.4	28.2	33.8	47.9	55.4
Fixed price revs as % of total (%)	66%	56%	30%	40%	49%	61%	65%
EBITDA	1.1	2.9	14.5	56.0	49.9	54.4	60.5
Reported profit	0.0	0.3	7.6	36.5	29.0	29.7	33.2
Dil EPS rptd (€)	0.02	0.05	1.46	7.08	5.63	5.76	6.44
CF ops post tax	0.8	5.3	12.7	48.2	42.6	46.8	51.5
Net cash used in investing activities	-2.4	-9.5	-25.4	-27.7	-36.6	-16.9	0.0
FCF (pre w/c, post int/lease liabs/A&D)	-1.5	-6.8	-15.2	18.2	3.3	27.4	49.0
Net debt/(cash) excl restr	15.6	20.1	35.4	17.2	14.0	-13.4	-62.5

Source: Company, BNP Paribas Exane estimates

### Operating cash-flow price sensitivities

We have noted our price deck will no doubt prove to be wrong; in times of extreme volatility we believe sensitivity analysis can be helpful in understanding the impact of events as they unfold.

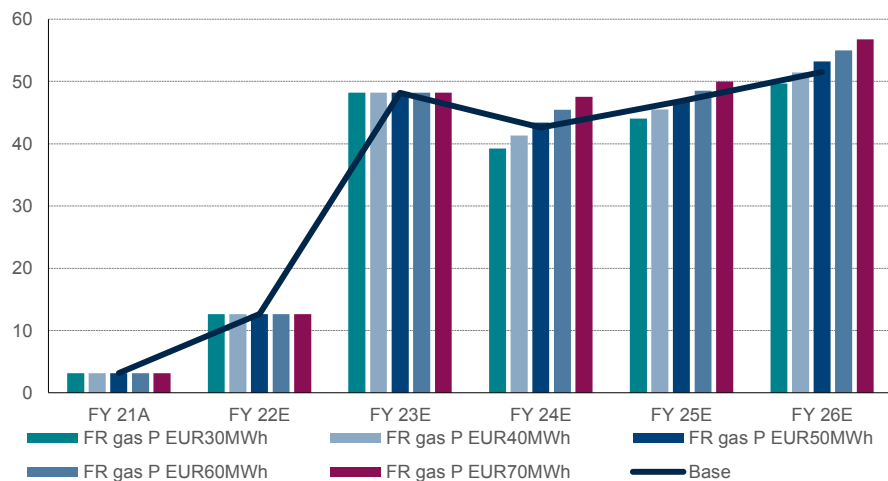
We show below our operating cash-flow forecasts by year to FY 2026 at a range of price assumptions. Institutional investors who would like to see our forecasts using different price decks, or who would like to understand the impact of pricing on different metrics can get in contact and we can run these for you.

### French gas price cash-flow sensitivities

We show below our forecast cash-flow sensitivity to CY 2023+ French power prices, which broadly equates to ~EUR3m pa for a EUR20/MWh power price increase. Note that we make no changes to our assumed hedging program when running these sensitivities.

**Figure 23: ~EUR20/MWh increase in French gas prices equates to ~EUR3m p.a. impact on operating CF**

Sensitivity of operating CF (post tax, pre w/c) to CY 2024+ French gas prices vs BNPPE base case

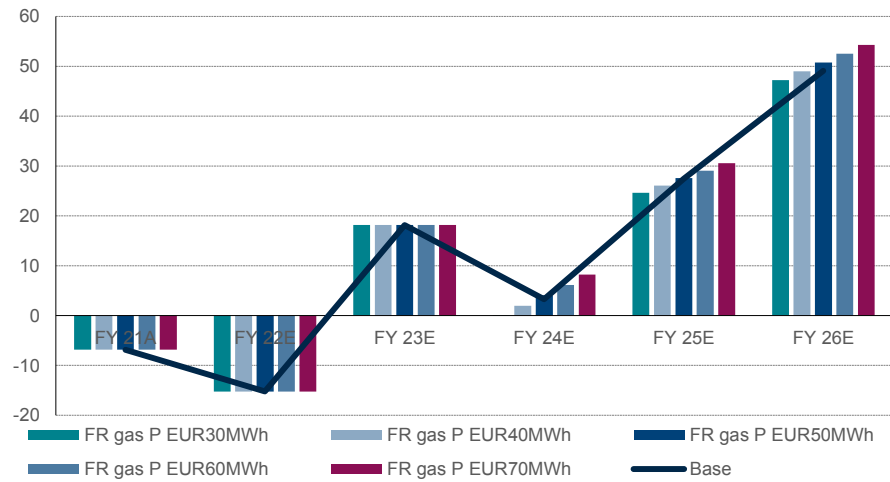


Source: Company, BNP Paribas Exane estimates. Note our hedging assumptions are unchanged across the sensitivity cases

This impact carries through to FCF, which as can be seen is set to grow rapidly.

**Figure 24: The operating CF impact flows through to FCF as shown below**

Sensitivity of FCF (pre w/c, post interest/lease liabs/A&D) to CY 2024+ French gas prices vs BNPPE base case



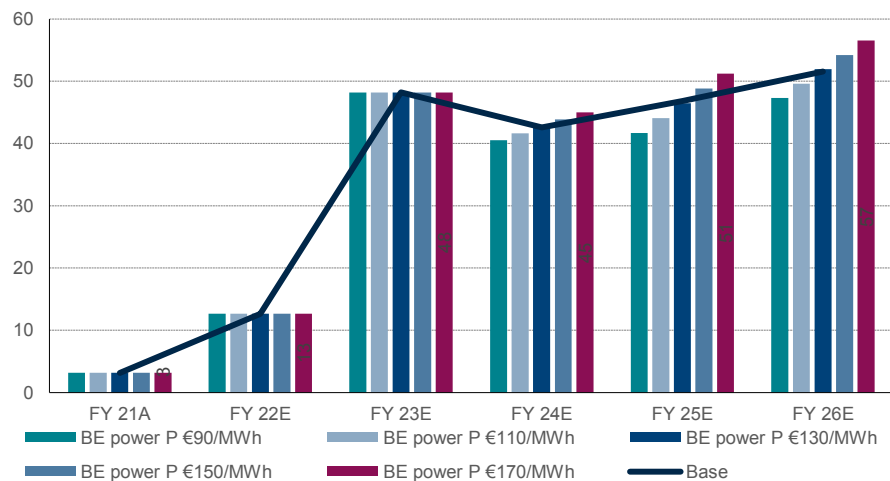
Source: BNP Paribas Exane estimates

**Belgian power price sensitivities - cashflow**

We show below our forecast cash-flow sensitivity to CY 2023+ Belgian power prices, which broadly equates to ~EUR3m pa for a EUR20/MWh power price increase. Again we make no changes to our assumed hedging program when running these sensitivities.

**Figure 25: ~EUR20/MWh increase in Belgian power prices equates to ~EUR3m p.a. impact on operating CF**

Sensitivity of operating CF (post tax, pre w/c) to CY 2024+ Belgian power prices vs BNPPE base case

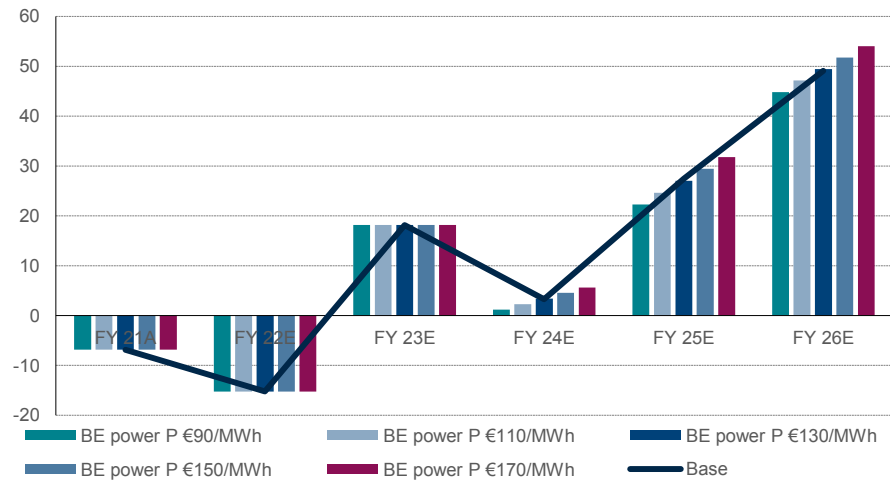


Source: Company, BNP Paribas Exane estimates. Note our hedging assumptions are unchanged across the sensitivity cases

Again this flows directly through to FCF, for which our sensitivities to Belgian power prices are shown below.

**Figure 26: The operating CF impact flows through to FCF as shown below**

Sensitivity of FCF (pre w/c, post interest/lease liabs/A&D) to CY 2024+ Belgian power prices vs BNPPE base case



Source: BNP Paribas Exane estimates

### FDE's business is profitable at much lower prices

Importantly FDE's green power generation business was profitable prior to recent power price increases. Aided by the impact of the French FiT, the business generated positive operating cash-flows during the extremely low-price period in 2020, following the onset of COVID.

In our November 2021 initiation, which incorporated a lower power price outlook, we forecast IRRs for power generation from AMM in France at ~40% and in Belgium at >60%.

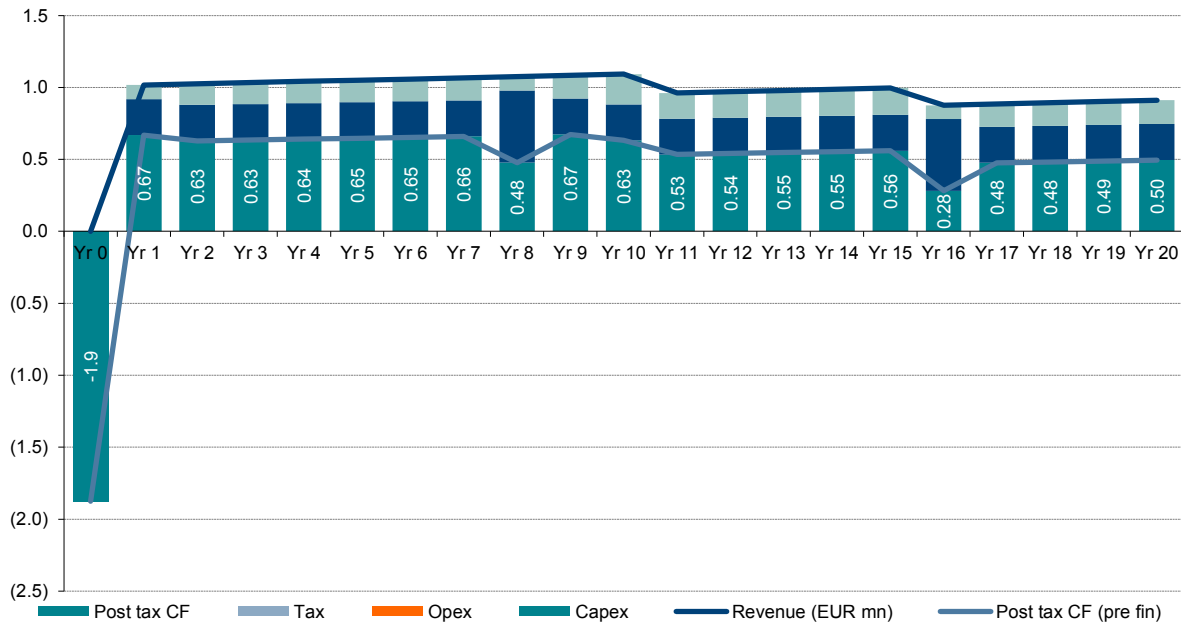
Price inflation and logistical constraints have been a rising concern across many sectors for months. Steel prices have already increased significantly over the past year and are surging higher following the invasion of Ukraine. Russia and Ukraine are amongst the top 5 global steel producers, together accounting for ~12% of seaborne supply. The key topic of this note, rising energy costs, will place further inflationary pressures across a range of industries and consumers.

We believe the cost of CHP units for FDE's near-term expansion program have been locked in through pre-orders, however, we have increased our cost estimates for future CHP units by 25% from 2023.

Incorporating this assumed cost increase our modelled IRR for a French CHP stands at ~35% - returns for the CHP business are relatively insensitive to capex.

**Figure 27: We forecast a 1.5MW CHP in France generates ~EUR0.56m pa post-tax CF (pre financing) over the life of the project**

CF breakdown for a 1.5MW CHP unit operating in France (EURm) - impact of overhaul every 8yrs can be observed in opex (EURm)



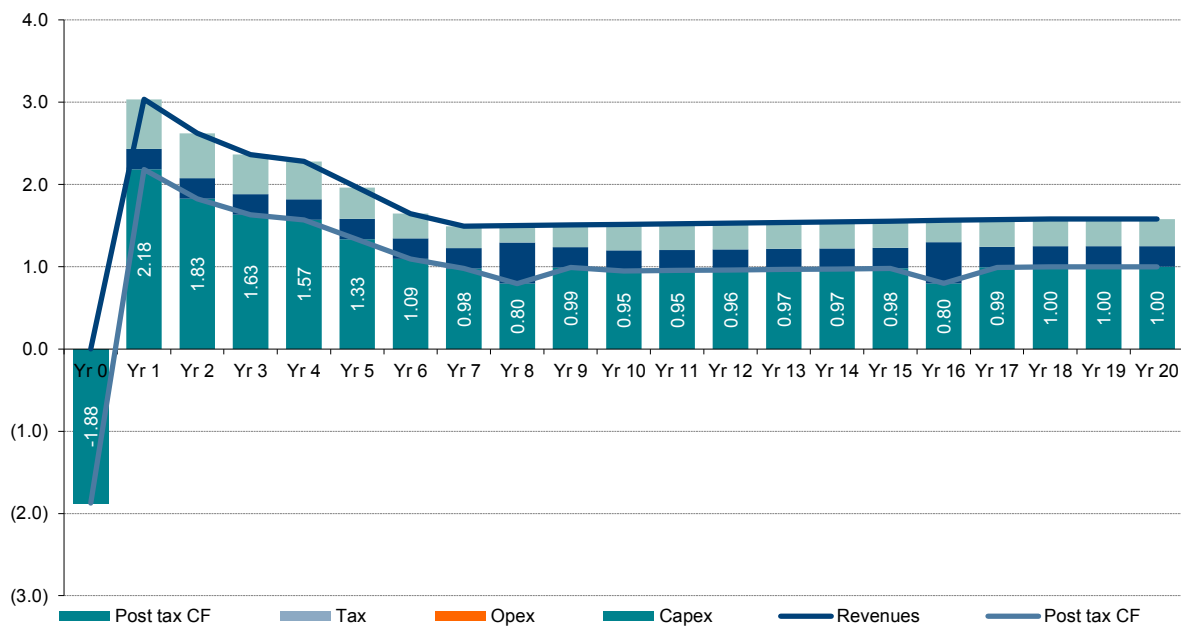
Source: BNP Paribas Exane estimates

**Forecast ~100% IRR from Belgian CHPs on revised price deck, assuming cost increase**

We estimate IRRs on new Belgian CHP installations fuelled by AMM have risen to ~100%, at our current Belgian power price forecasts. At EUR50/MWh Belgian power prices we estimate the IRR would fall to ~45%.

**Figure 28: We forecast a 1.5MW CHP in Belgium generates ~EUR1.1m pa post-tax CF (pre financing) over the life of the project**

CF breakdown for a 1.5MW CHP unit operating in Belgium - impact of overhaul every 8yrs can be observed in opex (EURm)



Source: BNP Paribas Exane estimates. Note the above chart uses our 2023 Belgian power price forecast in Yr1.



The above figures incorporate the contribution from Belgian Green Certificates for which power generation from CHP units qualifies.

### **Hedging should be reducing exposure to price swings**

FDE hedges a portion of its exposure to market prices, to reduce volatility and increase stability of revenues and cash-flows. The company operates a rolling two-year program targeting up to 80% of installed generation/production capacity.

In the context of rising prices observed over recent months we believe near-term prices will have been largely fixed, at healthy levels, prior to the recent further sharp price increases post Russia's invasion of Ukraine. Precise details of the hedging positions have not yet been provided and we look for an update regarding in conjunction with the FY H1 2022 results (24 March).

We have incorporated in our analysis an assumed hedging program covering ~80% of our forecast Belgian power generation for calendar 2022 (~45.8TWh) at an average price of ~EUR180/MWh. For French gas we have assumed ~50% of our forecast 2022 production (~120TWh) has been hedged at an average price of ~EUR45/MWh. These assumptions serve to reduce the sensitivity of our forecasts to near-term price movements, but have been estimated in the absence of detail around prices and volumes actually secured and are inherently uncertain.

### **Coal-Bed Methane – a large, undeveloped domestic gas resource**

FDE holds a large acreage position over coal seams which have not been mined, but have been shown to contain recoverable methane, known as Coal Bed Methane (CBM). The strategic value of all undeveloped gas resource has clearly increased in the context of Europe's desire to reduce its reliance on Russian gas imports.

#### ***Large resource base; looking at commercialisation options***

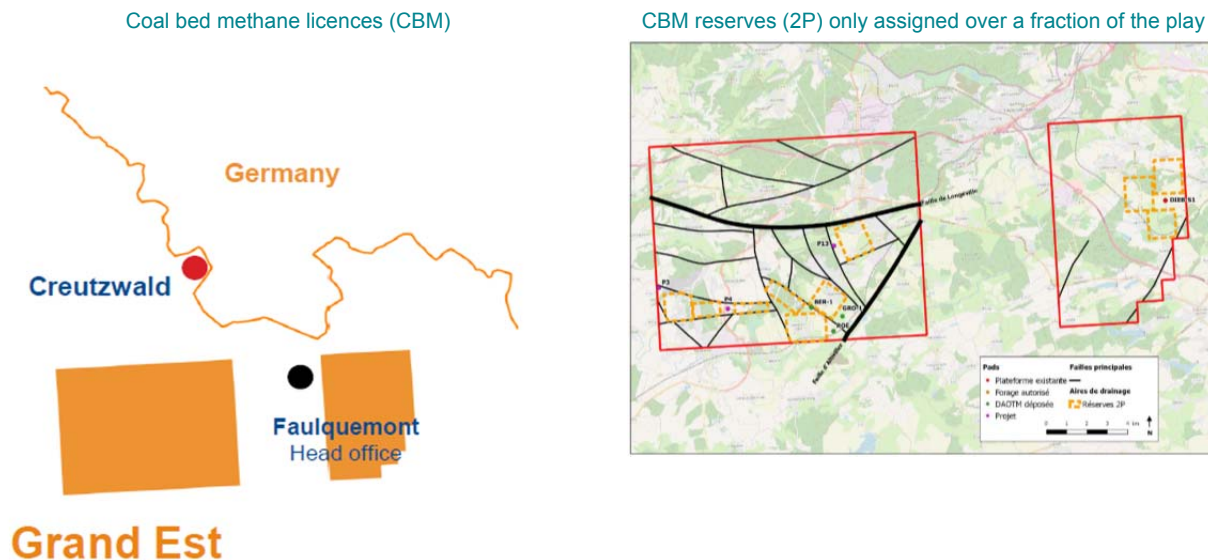
This is the largest gas resource in the east of France, with audited 2P reserves of 3.9bcm (138bcf), however, only 3.6% of all contingent resources on the Bleue Lorraine permit, and adjacent areas, have been assessed for their reserves potential. There is the potential for the reserves base to increase substantially over time with additional technical work.

Unlike AMM, which can have a high proportion of air in the gas, CBM is >95% methane and will require minimal processing.

The research permit covering the acreage expired in 2018 and a production licence has been applied for, to run to 2040. This application was deemed admissible and is being examined.

**Figure 29: 2P reserves have only been assigned to a fraction of the CBM acreage**

Acreage licenced for CBM activity, and area to which 2P reserves have been assigned (yellow dashed lines)



Source: Company

The methane trapped in the coals could be produced and sold into the French gas grid, displacing imports. Studies commissioned by FDE indicate ~32g CO<sub>2</sub>/kWh is generated through the production and delivery of gas imported to France, the bulk of which has historically come from Norway and Russia, with Russian volumes now likely to decline in future. CBM could be produced from FDE's acreage and delivered to the grid with an estimated 3.4g CO<sub>2</sub>/kWh emitted, i.e. 1/10th the emissions from production and transport, although clearly the emissions on combustion would be the same. With Europe grappling with high power prices, and potentially needing to weigh security of power supply/demand destruction against increased emissions from extending the life of existing coal-fired plant, there are clear benefits for society from increasing domestic gas production.

Although current development planning is principally focused on direct gas sales, and/or electricity production utilising CHPs, FDE is also studying the potential of using the methane to produce blue hydrogen. The associated CO<sub>2</sub> produced with the hydrogen could be captured and stored in the coal seams, which may enhance methane production and research is ongoing to determine the potential of this.

### Will energy producers be able to retain all the gains?

Governments are trying to protect consumers from (very) high energy bills, the full impact of which has not yet been felt owing to fixed price agreements. To fund these measures there has been increased discussion regarding measures to increase the government take from companies benefiting from the increase in gas prices.

As previously noted power generated from AMM in France is sold under a FiT which fixes prices for up to 15 years at considerably below current market levels (we forecast French power sales at a price of EUR72.8/MWh during FY 2022 vs market prices which could average ~EUR200/MWh). FDE's French power production therefore reduces the average cost of power supply to consumers.

In Belgium green power produced from AMM is sold at market prices, and FDE undertakes hedging to reduce price volatility. FDE is therefore benefitting from high power prices in Belgium. FDE also sells gas at market prices in France (with hedging to reduce volatility) and hence benefits from strong gas market prices.

At a high level we note that the company is not aware of any proposed measures to increase government take from its operations. Furthermore, the business of generating power from AMM is small in the context of total power consumption in Belgium; the same is true for AMM gas sales in France. Consequently any move to direct an increased share of cash-flows from AMM activity to consumers is unlikely to have a material impact upon consumer bills.

#### ***Potential for windfall taxes?***

The Spanish government proposed windfall taxes on all utility companies last year, including renewables selling at merchant prices, but excluding revenues from nuclear, hydro and renewables under fixed PPAs.

The recently published REPowerEU proposals permit European countries to introduce windfall taxes on companies benefitting from the impact of high gas prices in order to fund emergency measures to insulate consumers from high gas and power prices. The proposals state any such measures would need to be applied to all generators regardless of technology, but should not apply to fixed price sales agreed prior to the increase in gas prices. Any such measures should also be limited in time, not going beyond 30 June 2022, and they should not be retro-active.

FDE is not aware of any windfall tax proposals which would impact its green power production and we have not incorporated any assumed changes to taxation in our model.

#### ***Belgian Green Certificates***

In Belgium power generated from AMM also qualifies for Green Certificates. These Green Certificates account for ~11% of our FY 2024-26 revenue forecasts.

The Green Certificates are designed to encourage production of green power and are earned by green power generators based upon the volumes of power supplied and the CO2 emissions savings per unit compared to gas turbines. The certificates can be sold on the market, or sold back to the regional government at a guaranteed price (we model the guaranteed price). Electricity suppliers are required to submit green certificates to the government corresponding to their total supply of electricity, or face a fine.

FDE has not yet received the Green Certificates to which it is entitled, with the number of green certificates to be awarded per MW of power generated subject to review by the authorities. Current Belgian legislation covers generation of power using CHPs fired by natural gas, and biogas, but does not explicitly address AMM which has a negative carbon footprint over project life.

Belgium has been reviewing its regulation of Green Certificates, a process which commenced prior to recent price increases and is unrelated to recent developments. A draft law is not yet available and we model the current regime continuing to apply.

As noted in this report we believe European power prices are likely to remain significantly elevated versus history given Europe's stated intention to reduce its reliance on Russian gas. In this context we forecast the economics of Belgian power generation will be attractive without reliance upon Green Certificates.

Belgian Green Certificates account for ~1/3 of our EUR41.6/sh risked NAV of the 2022 expansion plan, and just under 1/4 of our EUR61.0/sh Future Projects risked NAV.

Clearly recent events are likely to catalyse reviews of energy legislation across Europe, which could take time. We expect development of domestic energy resources to be encouraged, with a continued focus on encouraging the adoption of green energy generation.

## Financial forecasts

Figure 30: Income statement

	FY 20A	FY 21A	FY 22E	FY 23E	FY 24E	FY 25E	FY 26E
FR gas price incl assumed hedging (EUR/MWh)	11.28	14.97	48.79	74.22	60.67	46.06	45.36
FR power price FiT (EUR/MWh)	72.03	73.83	72.81	71.06	65.62	64.10	63.92
BE power price excl hedging (EUR/MWh)	33.07	47.61	183.12	187.86	154.40	133.38	126.75
BE gas price incl assumed hedging (EUR/MWh)	31.18	42.89	119.17	193.33	154.40	133.38	126.75
\$/£	1.28	1.38	1.35	1.35	1.35	1.35	1.35
<b>Total installed CHP/PV capacity (MW)</b>	<b>12.0</b>	<b>14.7</b>	<b>31.2</b>	<b>58.1</b>	<b>85.1</b>	<b>113.6</b>	<b>119.6</b>
CHP capacity installed - power	12.0	14.7	31.2	43.2	70.2	98.7	104.7
Solar PV installed capacity	0.0	0.0	0.0	14.9	14.9	14.9	14.9
<b>No. CHP units operating @ period end</b>	<b>8.0</b>	<b>10.0</b>	<b>21.0</b>	<b>37.0</b>	<b>56.0</b>	<b>70.0</b>	<b>70.0</b>
France	6.0	8.0	10.0	26.0	44.0	57.0	57.0
Belgium	2.0	2.0	11.0	11.0	12.0	13.0	13.0
<b>Total sales vols (GWh)</b>	<b>280</b>	<b>321</b>	<b>421</b>	<b>561</b>	<b>782</b>	<b>1,012</b>	<b>1,121</b>
CHP sales vols - power	97	98	133	304	517	745	854
CHP sales vols - heat	0	11	22	22	22	22	22
Gas sales vols	183	211	263	223	223	225	226
Solar PV sales vols	0	0	0	8	16	16	16
Solar thermal sales vols	0	1	3	3	3	3	3
<b>Revenue</b>	<b>7.9</b>	<b>10.2</b>	<b>24.9</b>	<b>70.2</b>	<b>68.8</b>	<b>79.1</b>	<b>84.8</b>
Electricity	5.9	6.5	11.9	53.3	54.3	67.7	73.5
Gas (France)	1.9	3.5	12.5	16.0	13.2	10.1	10.0
Heat (France)	0.0	0.1	0.3	0.3	0.3	0.3	0.3
Solar thermal (France)	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Solar PV (France)	0.0	0.0	0.0	0.5	0.9	0.9	0.9
<b>Revs split btw fixed and mkt prices (EURm)</b>	<b>7.9</b>	<b>10.2</b>	<b>24.9</b>	<b>70.2</b>	<b>68.8</b>	<b>79.1</b>	<b>84.8</b>
Fixed price	5.2	5.7	7.4	28.2	33.8	47.9	55.4
BE power	0.7	1.0	5.0	26.0	21.8	21.1	19.4
Gas	1.9	3.5	12.5	16.0	13.2	10.1	10.0
<b>Revs split btw fixed and mkt prices (%)</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
Fixed price	66%	56%	30%	40%	49%	61%	65%
BE power	9%	9%	20%	37%	32%	27%	23%
Gas	25%	34%	50%	23%	19%	13%	12%
Other operating revenue	0.3	0.7	0.0	0.0	0.0	0.0	0.0
COGS	-3.9	-4.2	-6.5	-10.2	-14.8	-20.5	-20.0
<b>Gross profit</b>	<b>4.2</b>	<b>6.7</b>	<b>18.4</b>	<b>60.0</b>	<b>54.0</b>	<b>58.6</b>	<b>64.8</b>
Exploration expense	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net appropriations to provisions	0.1	-0.3	0.0	0.0	0.0	0.0	0.0
Other revenues/(expenses)	-0.1	0.1	0.0	0.0	0.0	0.0	0.0
Admin expenses	-3.2	-3.6	-3.8	-4.0	-4.1	-4.2	-4.3
<b>EBITDA</b>	<b>1.1</b>	<b>2.9</b>	<b>14.5</b>	<b>56.0</b>	<b>49.9</b>	<b>54.4</b>	<b>60.5</b>
<b>EBITDA margin (%)</b>	<b>13%</b>	<b>29%</b>	<b>58%</b>	<b>80%</b>	<b>73%</b>	<b>69%</b>	<b>71%</b>
DD&A	-1.2	-1.5	-3.0	-5.4	-9.4	-12.9	-14.4
<b>Operating profit</b>	<b>-0.1</b>	<b>1.4</b>	<b>11.5</b>	<b>50.6</b>	<b>40.6</b>	<b>41.5</b>	<b>46.1</b>
Financial revs	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cost of gross financial indebtedness	-0.5	-1.1	-1.4	-1.9	-1.9	-1.9	-1.8
Other financial expenses	0.0	-0.1	0.0	0.0	0.0	0.0	0.0
Goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Profit before tax</b>	<b>-0.7</b>	<b>0.2</b>	<b>10.1</b>	<b>48.7</b>	<b>38.7</b>	<b>39.6</b>	<b>44.3</b>
Current and deferred taxes	0.8	0.1	-2.5	-12.2	-9.7	-9.9	-11.1
Tax rate	90%	-13%	25%	25%	25%	25%	25%
<b>Profit after tax</b>	<b>0.0</b>	<b>0.3</b>	<b>7.6</b>	<b>36.5</b>	<b>29.0</b>	<b>29.7</b>	<b>33.2</b>
<b>Reported profit</b>	<b>0.0</b>	<b>0.3</b>	<b>7.6</b>	<b>36.5</b>	<b>29.0</b>	<b>29.7</b>	<b>33.2</b>
Group sh	0.1	0.3	7.5	36.6	29.1	29.8	33.3
Sh of non-controlling interests	-0.1	0.0	0.1	-0.1	-0.1	-0.1	-0.1
Non-recurring items post tax	0.0	-0.5	0.0	0.0	0.0	0.0	0.0
Adjusted profit	0.1	0.6	7.6	36.5	29.0	29.7	33.2
Average basic shares in issue	5.16	5.16	5.16	5.16	5.16	5.16	5.16
Diluted ave shares in issue	5.16	5.16	5.16	5.16	5.16	5.16	5.16
Basic EPS rptd (€)	0.02	0.05	1.46	7.08	5.63	5.76	6.44
Dil EPS rptd (€)	0.02	0.05	1.46	7.08	5.63	5.76	6.44
<b>Divi per sh (€/sh)</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

Source: Company, BNP Paribas Exane estimates

**Figure 31: Cash-flow statement**

	FY 20A	FY 21A	FY 22E	FY 23E	FY 24E	FY 25E	FY 26E
<b>Consolidated net income</b>	<b>0.0</b>	<b>0.3</b>	<b>7.6</b>	<b>36.5</b>	<b>29.0</b>	<b>29.7</b>	<b>33.2</b>
Tax expense and deferred-tax changes	-0.8	-0.1	2.5	12.2	9.7	9.9	11.1
Net deprn/impairment	1.2	1.5	3.0	5.4	9.4	12.9	14.4
Exploration expense	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net allocations on provisions	-0.1	0.3	0.0	0.0	0.0	0.0	0.0
Capital gains/losses on asset disposals	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Expense related to free stock award plan	0.1	0.1	1.1	1.1	1.2	1.2	1.2
Cost of gross long-term debt	0.5	1.1	1.4	1.9	1.9	1.9	1.8
Other non-monetary items	0.3	-0.1	0.0	0.0	0.0	0.0	0.0
Negative goodwill recognised in income statement	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Operating cash flow (pre WC/tax)</b>	<b>1.3</b>	<b>3.2</b>	<b>15.6</b>	<b>57.1</b>	<b>51.1</b>	<b>55.6</b>	<b>61.7</b>
Change in operating working capital requirement	-0.9	0.9	0.0	0.0	0.0	0.0	0.0
Change in WCR – Other assets and liabilities	0.4	1.2	0.0	0.0	0.0	0.0	0.0
<b>Cash flow from operations pre-tax</b>	<b>0.8</b>	<b>5.3</b>	<b>15.6</b>	<b>57.1</b>	<b>51.1</b>	<b>55.6</b>	<b>61.7</b>
Income tax paid	0.0	0.0	-2.9	-8.9	-8.5	-8.7	-10.2
<b>CF ops post tax</b>	<b>0.8</b>	<b>5.3</b>	<b>12.7</b>	<b>48.2</b>	<b>42.6</b>	<b>46.8</b>	<b>51.5</b>
Cash gen from discontinued operations	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Investments</b>							
Capitalised exploration costs	-0.4	-0.2	0.0	0.0	0.0	0.0	0.0
Tangible and intangible investments	-2.6	-10.4	-25.8	-30.0	-36.6	-16.9	0.0
Change in fixed-asset supplier debts	0.1	1.0	0.0	0.0	0.0	0.0	0.0
Subsidies received for investment activities	0.4	0.7	0.4	2.4	0.0	0.0	0.0
Acqns/disposals	0.0	-0.5	0.0	0.0	0.0	0.0	0.0
<b>Net cash used in investing activities</b>	<b>-2.4</b>	<b>-9.5</b>	<b>-25.4</b>	<b>-27.7</b>	<b>-36.6</b>	<b>-16.9</b>	<b>0.0</b>
Net cash used in disc ops	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>FCF (pre w/c, post int/lease liabs/A&amp;D)</b>	<b>-1</b>	<b>-7</b>	<b>-15</b>	<b>18</b>	<b>3</b>	<b>27</b>	<b>49</b>
<b>Financing</b>							
Bond subscription	0.0	0.0	25.0	0.0	15.0	0.0	0.0
Capital Increase	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Issue Expenses	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Borrowings and financial debts (excluding fees)	6.8	11.1	23.1	0.0	2.5	0.8	0.0
Repayment of loans and financial debts	-2.5	-3.8	-10.7	-5.8	-12.7	-4.0	-3.7
Other current financial debts	0.3	0.5	0.0	0.0	0.0	0.0	0.0
Cost of net debt: interests paid	-0.4	-0.4	-2.5	-2.4	-2.8	-2.6	-2.5
Charges paid on loans	-0.1	-0.1	-0.1	0.0	0.0	0.0	0.0
Sh based payments/distributions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Net CF from financing activities</b>	<b>4.2</b>	<b>7.3</b>	<b>34.8</b>	<b>-8.2</b>	<b>2.0</b>	<b>-5.7</b>	<b>-6.2</b>
<b>Net inc/dec in cash &amp; equivalents</b>	<b>2.6</b>	<b>3.1</b>	<b>22.1</b>	<b>12.3</b>	<b>8.1</b>	<b>24.3</b>	<b>45.3</b>
<b>Opening cash (incl restricted)</b>	<b>1.2</b>	<b>3.8</b>	<b>6.8</b>	<b>29.0</b>	<b>41.3</b>	<b>49.4</b>	<b>73.6</b>
Impact of FX	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Closing cash (incl restricted)</b>	<b>3.8</b>	<b>6.8</b>	<b>29.0</b>	<b>41.3</b>	<b>49.4</b>	<b>73.6</b>	<b>118.9</b>

Source: Company, BNP Paribas Exane estimates

**Figure 32: Balance sheet**

	FY 20A	FY 21A	FY 22E	FY 23E	FY 24E	FY 25E	FY 26E
<b>Non-current assets</b>							
Exploration assets	45.1	45.5	45.5	45.5	45.5	45.5	45.5
Other intangible assets	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Proven mining rights	24.7	24.5	24.5	24.5	24.5	24.5	24.5
Other tangible assets	10.8	19.8	42.1	64.4	91.6	95.6	81.2
Non-current financial assets	1.3	1.8	1.8	1.8	1.8	1.8	1.8
Goodwill	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deferred tax assets	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Total non-current assets	83.9	93.8	116.1	138.4	165.6	169.6	155.2
<b>Current assets</b>							
Inventories	0.4	0.6	0.6	0.6	0.6	0.6	0.6
Trade and related receivables	0.9	1.4	1.4	1.4	1.4	1.4	1.4
Other current assets	3.3	4.1	4.1	4.1	4.1	4.1	4.1
Prepaid and deferred expenses	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Cash and equivalents	3.8	7.0	29.1	41.5	49.5	73.8	119.1
Total current assets	8.5	13.2	35.4	47.7	55.8	80.0	125.3
<b>Total assets</b>	<b>92.4</b>	<b>107.0</b>	<b>151.5</b>	<b>186.1</b>	<b>221.4</b>	<b>249.6</b>	<b>280.5</b>
<b>Non-current liabilities</b>							
Non-current financial debt	12.6	20.8	58.2	52.4	57.2	54.0	50.3
Non-current provisions	4.2	4.2	4.2	4.2	4.2	4.2	4.2
Deferred tax liabilities	6.4	6.4	6.0	9.2	10.4	11.6	12.5
Other non-current liabilities	1.0	0.5	0.5	0.5	0.5	0.5	0.5
Provisions for pension commitments	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total non-current liabilities	24.1	32.0	68.9	66.4	72.4	70.4	67.6
<b>Current liabilities</b>							
Current financial debt	6.8	6.3	6.3	6.3	6.3	6.3	6.3
Current provisions	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Trade and related payables	1.3	2.8	2.8	2.8	2.8	2.8	2.8
Fixed-asset suppliers	3.9	4.9	4.9	4.9	4.9	4.9	4.9
Other current liabilities	1.8	5.7	5.7	5.7	5.7	5.7	5.7
Total current liabilities	13.9	19.8	19.8	19.8	19.8	19.8	19.8
<b>Total liabilities</b>	<b>38.1</b>	<b>51.8</b>	<b>88.7</b>	<b>86.2</b>	<b>92.2</b>	<b>90.2</b>	<b>87.4</b>
<b>Net assets</b>	<b>54.3</b>	<b>55.3</b>	<b>62.8</b>	<b>99.9</b>	<b>129.2</b>	<b>159.4</b>	<b>193.1</b>
Share capital	5.2	5.2	5.2	5.2	5.2	5.2	5.2
Share premium reserve	44.1	44.1	44.1	44.1	44.1	44.1	44.1
Other reserves	5.0	5.8	5.8	5.8	5.8	5.8	5.8
Net income, Group's share	0.1	0.3	7.7	44.9	74.3	104.5	138.3
Other equity items	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Shareholders' Equity – Group's Share</b>	<b>54.4</b>	<b>55.3</b>	<b>62.8</b>	<b>100.0</b>	<b>129.3</b>	<b>159.6</b>	<b>193.4</b>
Minority interests not giving control	-0.1	0.0	0.0	0.0	-0.1	-0.2	-0.2
<b>Shareholders' Equity of the Consolidated Group</b>	<b>54.3</b>	<b>55.3</b>	<b>62.8</b>	<b>99.9</b>	<b>129.2</b>	<b>159.4</b>	<b>193.1</b>
Net debt/(cash) excl restr	15.6	20.1	35.4	17.2	14.0	-13.4	-62.5
Net debt/(cash) incl restr	15.6	20.1	35.4	17.2	14.0	-13.4	-62.5
Net debt/equity	29%	36%	56%	17%	11%	-8%	-32%

Source: Company, BNP Paribas Exane estimates

## Appendices – price forecasts and futures curves

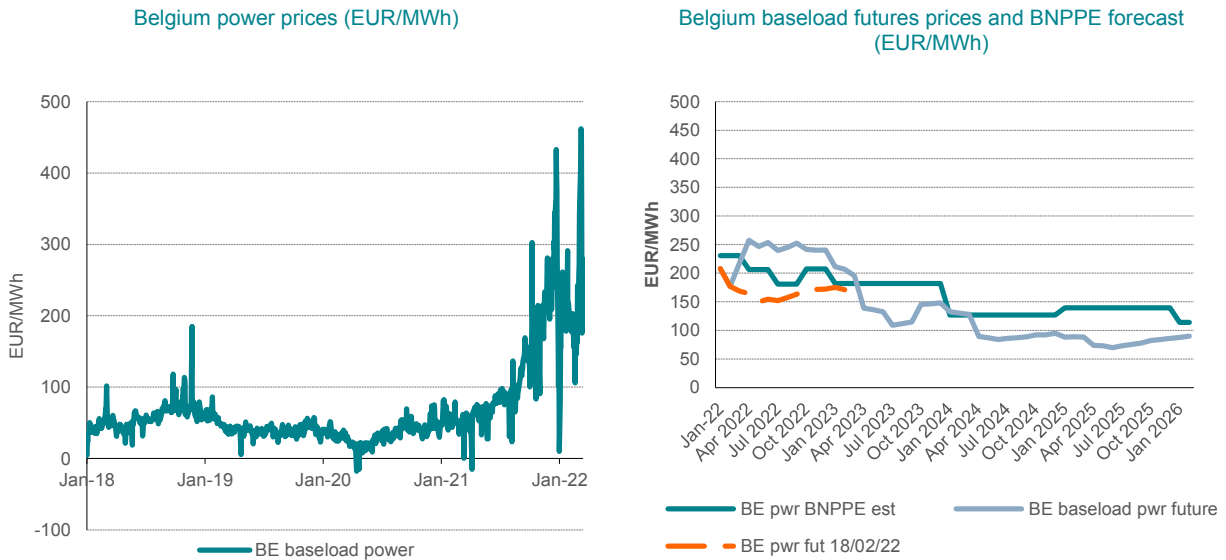
We summarise below recent price history for the key streams FDE is exposed to, highlighting extreme volatility. We show our forecasts compared to the futures strip, whilst noting futures pricing has also been extremely volatile in recent days/weeks.

### Belgium green power sales – market prices

In Belgium power generated from AMM is sold at market prices.

As can be seen below Belgian power pricing increased significantly from around EUR50/MWh to around EUR100/MWh in late summer 2021 and over EUR200/MWh from November 2021. On some days in late 2021 prices spiked above EUR300/MWh and futures prices have, in recent days, moved above EUR450/MWh before partially reversing.

**Figure 33: Belgium power prices have increased rapidly since summer 2021 and have recently been at record levels**

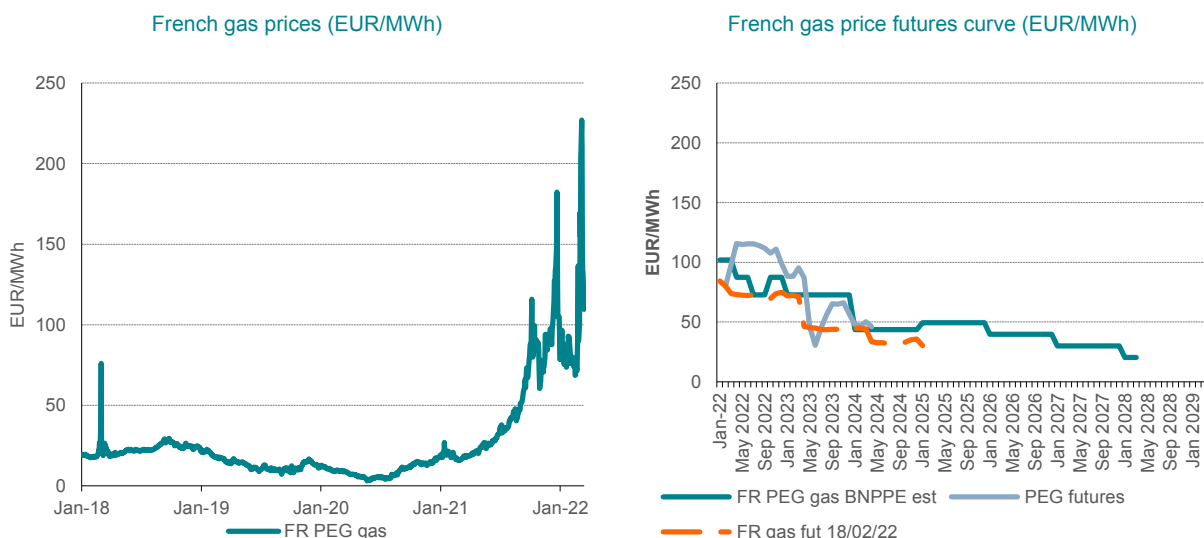


Source: BNP Paribas Exane estimates. Note 18 February 2022 was the Friday before Russia formally recognised the eastern Ukrainian regions of Luhansk and Donetsk

### French gas sales – market prices

FDE sells a portion of the methane recovered from abandoned coal mines into the French grid at market prices, hence, these revenues are also exposed to the substantial increase in French gas prices. As shown below prices have pushed over EUR200/MWh in recent days, although they have pulled back from recent peaks.

**Figure 34: French gas prices have increased rapidly since summer 2021 and have recently been at record levels**



Source: BNP Paribas Exane estimates. Note 18 February 2022 was the Friday before Russia formally recognised the eastern Ukrainian regions of Luhansk and Donetsk

#### **French power sales – fixed pricing in the near-term**

Power generated in France using methane recovered from abandoned mines is sold under a Feed-in-Tariff (FiT) at largely fixed prices, with (modest) inflation factors. The business is not exposed to near-term power price movements, however, once the FiT's expire (10-15 years post start-up) power generated will be sold at market prices.

The realised price depends upon the size of the installation, the lower and upper limits for price setting purposes are shown below.

**Figure 35: French FiT for AMM power generation**

	FY 20A	FY 21A	FY 22E	FY 23E	FY 24E	FY 25E	FY 26E	FY 27E	FY 28E	FY 29E	FY 30E
French electricity price - AMM FiT starting price <=1.5MW (EUR/MWh)	78.59	78.62	79.49	80.30	80.29	80.29	80.28	80.27	80.26	80.25	80.25
French electricity price - AMM FiT starting price >=4.8MW (EUR/MWh)	59.10	59.12	59.77	60.38	60.38	60.37	60.37	60.36	60.35	60.35	60.34

Source: BNP Paribas Exane estimates



# Investment case, valuation and risks

## FDE

### **Investment case**

A focus on green energy generation in Europe sees LFDE benefit from incentives, providing long-term revenue visibility, and resulting in low financing costs. Growth will be driven by the ongoing roll-out of heat/power cogeneration units fuelled by gas from abandoned mines - reducing CO2 emissions to atmosphere. The company is in the early stages of expansion into the solar PV and solar thermal markets, and has secured a large Coal Bed Methane (CBM) resource for which monetisation studies are ongoing.

### **Valuation methodology**

We value the company using a risk-adjusted NAV approach, discounting the future cash-flows from the asset base and adjusting for the balance sheet and corporate overheads.

### **Risks**

*To the upside:*

**CHP growth:** Management intends to continue the expansion beyond the current program, both in existing countries of operation and by moving into new territories. The current countries of operation had relatively modest coal mining industries historically, other countries in Europe offer much larger potential for capture and utilisation of AMM. We have not incorporated any benefit from monetisation of AMM resource additions.

**Solar growth:** We model only the current projects in our analysis; management intends to continue growing this part of the business.

**Gas and power prices:** European gas and power prices have been extremely strong and could exceed our forecasts.

**Regulation:** LFDE believes a review of the Belgian legislation covering the award of Green Certificates could result in an increase in the number of certificates awarded per MW of power generated from AMM. There is no firm timeframe, however, for completion of this review. We incorporate the current legislation in our analysis, and model monetisation of Green Certificates from 2H FY 23.

**Resource estimates:** There is uncertainty associated with all natural resource assessments; for AMM the impact of historic mining activity on the resource introduces another variable in the assessment. This uncertainty could result in revisions to the upside or downside.

*To the downside:*

**Regulation:** The capture and utilisation of AMM benefits from supportive government policy in France and Belgium - we assume this remains in place. There have been delays in crediting Belgian Green certificates to LFDE; we assume the agreed approach is honoured and these certificates are paid - they account for approximately a third of our Belgian revenue forecast; Belgium accounts for ~40% of our gross asset value. In France the FiT for power from AMM is set significantly below current market prices, was only introduced in 2016, and covers a relatively modest proportion of total French power generation.

**Execution:** Execution of the planned expansion program at a slower pace than we have modelled would be detrimental to our forecasts.

**Gas and power prices:** Although European gas and power prices have been extremely strong vs history the market remains volatile and prices could move below our forecasts.

**Resource estimates:** There is uncertainty associated with all natural resource assessments; for CBM the impact of historic mining activity on the resource introduces another variable in the assessment. This uncertainty could result in revisions to the upside or downside. In the event reserves for a given area are smaller than anticipated, the CHP units, which comprise the bulk of the capex for an AMM project, can easily be disconnected and moved to another site.

**CBM uncertainty:** A CBM development licence has been applied for and is currently being reviewed. If a licence is not granted the CBM resource potential may not be exploited. It is also not clear when, and precisely how, the CBM resource could be developed. Relatively few deviated wells have been drilled by LFDE over the large acreage position, and uncertainty remains about the commerciality of any future CBM project. Note none of these statements impact the AMM potential.

**Environmental protests:** CBM development activity sometimes attracts environmental protests. Note this does not relate to AMM activity, which actively reduces methane emissions to atmosphere.

**Low returns projects:** In contrast to the AMM activity we forecast marginal returns for the solar PV project, which is yet to enter the execution phase. There is therefore relatively little margin for error in the project execution stage. This is balanced by the fact the power price is fixed initially, there is expected to be a limited/no equity requirement for the project, and debt is ring-fenced at the project level.

## DISCLOSURE APPENDIX

### Analyst Certification

I, Thomas Martin, (authors of or contributors to the report) hereby certify that all of the views expressed in this report accurately reflect my personal view(s) about the company or companies and securities discussed in this report. No part of my compensation was, is, or will be, directly, or indirectly, related to the specific recommendations or views expressed in this research report.

### Non-US Research Analyst Disclosure

The research analysts at Exane SA (including its branches in the United Kingdom, the European Economic Area or Switzerland) named below were involved in preparing this research report. They are not associated persons of Exane Inc. and thus they are not registered or qualified in the U.S. as research analysts with the Financial Industry Regulatory Authority (FINRA) or the New York Stock Exchange (NYSE). These non-U.S. analysts are not subject to the NASD Rule 2241 and NYSE Rule 472 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

Thomas Martin      Exane SA London branch

Exane SA is authorised by the Autorité de contrôle prudentiel et de régulation ("ACPR") and by the Autorité des Marchés Financiers ("AMF") in France.

Exane SA branches based in the European Economic Area are authorized and regulated by ACPR and by the local relevant regulator.

Exane SA Geneva Branch is authorized and regulated by the Swiss Financial Market Supervisory Authority ("FINMA")

Exane SA, London Branch is deemed authorised and regulated by the Financial Conduct Authority. Details of the Financial Services Contracts Regime, which allows EEA-based firms to operate in the UK for a limited period to carry on activities which are necessary for the performance of pre-existing contracts, are available on the Financial Conduct Authority's website

Exane Inc. is regulated by FINRA and the U.S. Securities and Exchange Commission in the United States.

### Research Analyst Compensation

The research analyst(s) responsible for the preparation of this report receive(s) compensation based upon various factors including overall firm revenues, which may include investment banking activities.

### Sponsored Research

The subject Company of this Research report has commissioned Exane to cover its stock and, consequently, Exane has received compensation from the Company for the preparation and dissemination of this research report.

### Research Analyst-Specific Disclosures

The research analyst(s) responsible for the preparation of this report (or members of their household) may have a relationship with the companies covered by this research report, as described in the numbered disclosures below. The table immediately below indicates which, if any, of these disclosures apply to the research analyst(s) responsible for preparation of this research report.

Research Analyst(s)	Companies	Disclosures
NONE		

1 – The research analyst(s) responsible for the preparation of this report or a member of his/her household has/have a financial interest in the securities of the subject company/ies, as indicated in the previous table.

2 – The research analyst(s) responsible for the preparation of this report or a member of his/her household serve(s) as an officer, director or advisory board member of the subject company/ies indicated in the previous table.

3 – The research analyst(s) responsible for the preparation of this report received compensation from the subject company/ies indicated in the previous table in the past twelve months.

### Exane-Specific Regulatory Disclosures

Exane SA (including Exane SA branches, based in the United Kingdom, in the European Economic Area and in Switzerland) and Exane Inc. (collectively, "Exane") may have a relationship with the companies covered by this research report, as described in the numbered disclosures below. The table immediately below indicates which, if any, of these disclosures apply to Exane's relationship with the subject company/ies.

Companies	Disclosures
FDE	13; 14

1 – Exane beneficially owns 1% or more of any class of common equity securities of the subject company/ies.

2 – Exane managed or co-managed an offering of Equity securities for the subject company/ies in the past 12 months.

3 – Exane received compensation for investment banking services from the subject company/ies in the past 12 months (the only investment banking services for Exane with regards to the subject company/ies are those when Exane is distributor or underwriter for Equity securities offerings managed-or co-managed by BNP Paribas, when BNP Paribas managed or co-managed an offering of Equity securities for the subject company/ies).

4 – Exane expects to receive or intends to seek compensation for investment banking services from the subject company/ies in the next 3 months.

5 – Exane SA is a market maker and/or liquidity provider in the securities of the subject company/ies.

6 – Exane Inc. received compensation for products and services other than investment banking services from the subject company/ies in the past 12 months.

7 – Exane Inc. had an investment banking services client relationship with the subject company/ies in the past 12 months.

8 – Exane Inc. had a non-investment banking, securities-related client relationship with the subject company/ies in the past 12 months.

9 – Exane Inc. had a non-securities-related services relationship with the subject company/ies in the past 12 months.

10 – Exane Inc. is a market maker in the securities of the subject company/ies.

11 – Exane beneficially owns at least 0.5% long or short position of the subject company/ies.

12 – Exane received compensation from a Private Equity firm to carry out a bespoke work related to the subject company/ies in the past 12 months.

13 – Exane received or expects to receive compensation for non-investment banking services from the subject company/ies in the past 12 months or in the next 3 months.

14 – Sections of this report, with the research summary, target price and rating removed, have been presented to the subject company/ies prior to its distribution, for the sole purpose of verifying the accuracy of factual statements.

15 – Following the presentation of sections of this report to this subject company, some conclusions were amended.

### Commitment to transparency on potential conflicts of interest: BNP Paribas

Exane is operationally independent of BNP Paribas (BNPP) and the current arrangements between the two companies are structured to ensure the independence of Exane's research, published under the brand name "BNP Paribas Exane". Nevertheless, to respect a principle of transparency, we separately identify potential conflicts of interest with BNPP regarding the company/ies covered by this research document.

### BNP Paribas-related disclosures

BNPP may have a relationship with the companies covered by this research report, as described in the numbered disclosures below. The table immediately below indicates which, if any, of these disclosures apply to BNPP's relationship with the subject company/ies.

Companies	Disclosures
NONE	

1 – BNPP beneficially owns 1% or more of any class of common equity securities of the subject company/ies

2 – BNPP managed or co-managed an offering of Equity securities for the subject company/ies in the past 12 months

3 – BNPP acted as Advisor in a Public Offer involving the subject Company/ies in the past 12 months.

4 – BNPP received compensation for investment banking services from the subject company/ies in the past 12 months

5 – BNPP expects to receive or intends to seek compensation for investment banking services from the subject company/ies in the next 3 months

6 – A member of senior BNPP management is a member of the Board of the subject company

7 – BNPP beneficially owns at least 0.5% long or short position of the subject company/ies.

8 – BNPP has been mandated by the subject company/ies for a bond issue in the last 12 months.

## Price and Ratings Chart

### FDE

Historical closing price & target price (as of 14/03/2022)



Source: BNP Paribas Exane

### Historical rating & target price changes

The latest company-specific disclosures, valuation methodologies and investment case risks for all other companies covered by this document are available on <http://cube.exane.com/compliance>.

**LONDON**

Branch of Exane SA  
1 Hanover Street  
London W1S 1YZ  
UK  
Tel: (+44) 207 039 9400  
Fax: (+44) 207 039 9440

**PARIS**

Exane SA  
6 Rue Ménars  
75002 Paris  
France  
Tel: (+33) 1 44 95 40 00  
Fax: (+33) 1 44 95 40 01

**FRANKFURT**

Branch of Exane SA  
Europa-Allee 12, 3rd floor  
60327 Frankfurt  
Germany  
Tel: (+49) 69 42 72 97 300  
Fax: (+49) 69 42 72 97 301

**GENEVA**

Branch of Exane SA  
Rue du Rhône 80  
1204 Geneva  
Switzerland  
Tel: (+41) 22 718 65 65  
Fax: (+41) 22 718 65 00

**MADRID**

Branch of Exane SA  
Calle Génova, 27  
7th Floor  
Madrid 28004  
Spain  
Tel: (+34) 91 114 83 00  
Fax: (+34) 91 114 83 01

**MILAN**

Branch of Exane SA  
Via dei Bossi 4  
20121 Milan  
Italy  
Tel: (+39) 02 89 63 17 13  
Fax: (+39) 02 89 63 17 01

**NEW YORK**

Exane Inc.  
12 East 49th Street  
30th Floor  
New York, NY 10017  
USA  
Tel: (+1) 212 634 4990  
Fax: (+1) 212 634 5171

**SAN FRANCISCO**

Exane Inc.  
201 Mission Street  
San Francisco, CA 94105  
USA  
Tel: (+1) 212 634 4975

**STOCKHOLM**

Branch of Exane SA  
Hovslagargatan 3  
111 48 Stockholm  
Sweden  
Tel: (+46) 8 5663 9820  
Fax: (+46) 8 5063 9751

All Exane research documents are available to all clients simultaneously on the Exane website (<http://cube.exane.com>). Most published research is also available via third-party aggregators such as Bloomberg, Refinitiv, Factset and Capital IQ. Exane is not responsible for the redistribution of research by third-party aggregators.

**Important notice: Please refer to our complete disclosure notice and conflict of interest policy available on <http://cube.exane.com/compliance>**

This research is produced by one or more of EXANE SA (including Exane SA branches, based in the United Kingdom, in the European Economic Area and in Switzerland) and Exane Inc (collectively referred to as "EXANE"). EXANE SA is authorized by the Autorité de Contrôle Prudentiel et de Résolution and regulated by the Autorité des Marchés Financiers ("AMF"). Exane SA branches based in the European Economic Area are authorized and regulated by ACPR and by the local relevant regulator. Exane SA Geneva Branch is authorized and regulated by the Swiss Financial Market Supervisory Authority ("FINMA"). Exane SA, London Branch is deemed authorised and regulated by the Financial Conduct Authority. Details of the Financial Services Contracts Regime, which allows EEA-based firms to operate in the UK for a limited period to carry on activities which are necessary for the performance of pre-existing contracts, are available on the Financial Conduct Authority's website.

Exane Inc is registered and regulated by the Financial Industry Regulatory Authority ("FINRA"). In accordance with the requirements of Financial Conduct Authority COBS 12.2.3R and associated guidance, of article 313-20 of the AMF Règlement Général, and of FINRA Rule 2241, Exane's policy for managing conflicts of interest in relation to investment research is published on Exane's web site ([cube.exane.com](http://cube.exane.com)). Exane also follows the guidelines described in the code of conduct of the Association Française des Entreprises d'Investissement ("AFEI") on managing conflicts of interest in the field of investment research. This code of conduct is available on Exane's web site (<http://cube.exane.com>).

This research is solely for the private information of the recipients. All information contained in this research report has been compiled from sources believed to be reliable. However, no representation or warranty, express or implied, is made with respect to the completeness or accuracy of its contents, and it is not to be relied upon as such. Opinions contained in this research report represent Exane's current opinions on the date of the report only. Exane is not soliciting an action based upon it, and under no circumstances is it to be used or considered as an offer to sell, or a solicitation of any offer to buy.

While Exane endeavours to update its research reports from time to time, there may be legal and/or other reasons why Exane cannot do so and, accordingly, Exane disclaims any obligation to do so. As Exane provides ongoing coverage of this company, this report may not be the most recently published or contain the most up-to-date information. Please refer to <https://cube.exane.com/sponsored/home> to ensure that you are accessing the most recent report relating to this company.

This report is provided solely for the information of professional investors who are expected to make their own investment decisions without undue reliance on this report and Exane accepts no liability whatsoever for any direct or consequential loss arising from any use of this report or its contents.

This report may not be reproduced, distributed or published by any recipient for any purpose. Any United States person wishing to obtain further information or to effect a transaction in any security discussed in this report should do so only through Exane Inc., which has distributed this report in the United States and, subject to the above, accepts responsibility for its contents.

BNP PARIBAS has acquired VERNER INVESTISSEMENTS, the parent company of Exane. VERNER INVESTISSEMENTS is wholly owned and controlled by BNP PARIBAS, which holds 100% of the share capital and voting rights of VERNER INVESTISSEMENTS.

**Company description**

LFDE produces low carbon energy in northern France and southern Belgium, with ambitions to replicate the business model in other countries. The company has secured the rights to develop gas associated with coal fields; solar PV and solar thermal projects are also being undertaken, redeveloping former industrial lands with modern, clean energy technologies. Studies are ongoing to investigate the potential for hydrogen generation and CCS within the asset base. The capture, and utilisation for power generation, of gas from the galleries of abandoned mines avoids methane emissions to the atmosphere, and is therefore a green power solution.

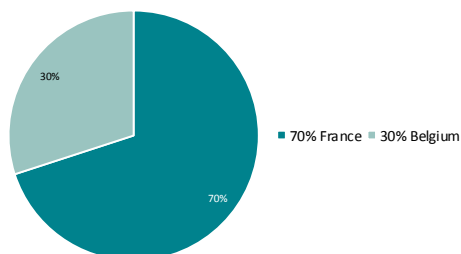
**Management**

Julien Moulin, Chairman  
 Antoine Forcinal, CEO  
 Aurelie Tan, CFO

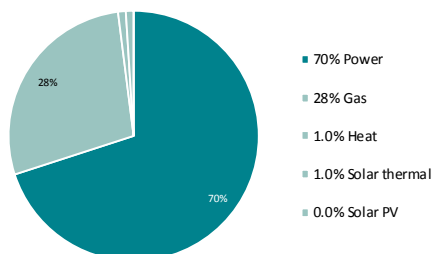
**Ownership structure**

Other	59.7%
F Durr	10.0%
J Moulin	7.9%
Chalopin family	7.8%
Financiere Arbevel	7.5%
Historical S/H in European Gas	7.1%
Other Shareholders	0.0%

**Revenues**



**Revenues**



**Analyst**

Thomas Martin (+44) 203 430 8435  
 Thomas.Martin@exanebnpparibas.com

**Peer group YTD performance**

Stock	Price		YTD performance in EUR (%)	
	(14 Mar. 22)		Abs.	Rel. Sector
<b>FDE (SR)</b>	EUR	<b>40.6</b>	<b>39.5</b>	49
Volitalia SA (=)	EUR	20.5	4.0	11
Neoen (-)	EUR	35.5	(7.1)	(1)
ENGIE (+)	EUR	11.4	(12.2)	(6)
Veolia (RS)	EUR	28.0	(13.1)	(7)
EDF (+)	EUR	8.7	(15.6)	(10)

**Sector calendar**

- 15 Mar. 22 **CEZ:** Annual Results 2021  
**RWE:** Annual Results 2021 (07:00 CET)  
**Naturgy:** AGM (09:00 CET)
- 16 Mar. 22 **E.ON:** Annual Results 2021 (07:30 CET)  
**Naturgy:** AGM (09:00 CET)
- 17 Mar. 22 **Enel:** Annual Results 2021  
**Terna:** Annual Results 2021  
**Veolia:** Annual Results 2021 (07:30 CET)  
**Snam:** Annual Results 2021 (08:00 CET)  
**Verbund:** Annual Results 2021 (08:00 CET)
- 18 Mar. 22 **ContourGlobal:** Preliminary Results 2021 (08:00 CET)
- 22 Mar. 22 **PGE:** Annual Results 2021  
**Renewi:** Annual Trading Statement 2021/22 (08:00 CET)  
**Iberdrola:** Capital Markets Day (09:30 CET)  
**Hera:** HER IM - BoD of the approval of FY 2021 results
- 24 Mar. 22 **Terna:** Annual Business Plan 2021 (11:30 CET)  
**Siemens Gamesa:** AGM (12:00 CET)  
**Volitalia SA:** Annual Results 2021 (18:00 CET)
- 25 Mar. 22 **United Utils.:** Pre-Close  
Trading Statement 2021/22 (08:00 CET)  
**Siemens Gamesa:** AGM (12:00 CET)
- 28 Mar. 22 **Fortum:** AGM (08:00 CET)
- 29 Mar. 22 **Iren:** IRE IM - BoD for the approval of FY 2021 results
- 30 Mar. 22 **Tauron:** Annual Results 2021  
**Enagas:** AGM (12:00 CET)
- 31 Mar. 22 **EDP Renovaveis:** AGM  
**Enagas:** AGM (12:00 CET)
- 05 Apr. 22 **Vestas:** AGM
- 06 Apr. 22 **EDP:** AGM
- 07 Apr. 22 **EDP Renovaveis:** AGM (12:00 CET)
- 08 Apr. 22 **Orsted:** AGM
- 12 Apr. 22 **Pennon:** Pre-Close Trading Statement 2021/22 (08:00 CET)
- 19 Apr. 22 **Public Service:** AGM (19:00 CET)
- 21 Apr. 22 **ENGIE:** AGM (14:30 CET)  
**The AES Corp:** AGM (15:30 CET)
- 25 Apr. 22 **Verbund:** AGM
- 26 Apr. 22 **Italgas:** AGM  
**American Electr.:** AGM (15:00 CET)
- 27 Apr. 22 **Drax:** AGM  
**Iberdrola:** Q1 Results 2022  
**Snam:** AGM  
**Drax:** Q1 Trading Statement 2022 (08:00 CET)
- 28 Apr. 22 **Hera:** AGM  
**RWE:** AGM  
**Scatec:** AGM
- 29 Apr. 22 **Terna:** AGM  
**Orsted:** Q1 Results 2022 (08:00 CET)
- 03 May 22 **Uniper:** Q1 Results 2022 (07:30 CET)  
**Neoen:** Q1 Revenues 2021 (17:45 CET)
- 04 May 22 **EDP Renovaveis:** Q1 Results 2022  
**Enel:** Q1 Results 2022  
**EDF:** Q1 Revenues 2021 (07:30 CET)  
**Vestas:** Q1 Results 2022 (08:30 CET)
- 05 May 22 **EDP:** Q1 Results 2022  
**Siemens Gamesa:** Q2 Results 2021/22 (07:00 CET)  
**Italgas:** Q1 Results 2022 (08:00 CET)
- 06 May 22 **Scatec:** Q1 Results 2022 (06:00 CET)



**LONDON**  
(+44) 207 039 9400

**FRANKFURT**  
(+49) 69 42 72 97 300

**MADRID**  
(+34) 91 114 83 00

**NEW YORK**  
(+1) 212 634 4990

**STOCKHOLM**  
(+46) 8 5663 9820

**PARIS**  
(+33) 1 44 95 40 00

**GENEVA**  
(+41) 22 718 65 65

**MILAN**  
(+39) 02 89 63 17 13

**SAN FRANCISCO**  
(+1) 212 634 4975

Price at 14 Mar. 22: EUR40.6

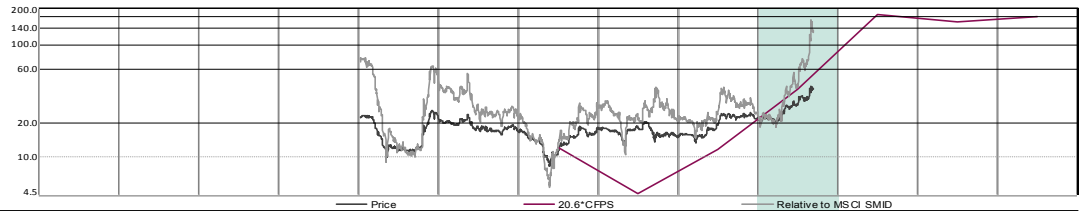
**Valuation range (EUR): 42.0 (+3%) | 61.0 (+50%)**

Refinitiv / Bloomberg: LFDE.PA1 / FDE FP Analyst: Thomas Martin (+44) 203 430 8435

**FDE**

Utilities - France

Company Highlights			
	EURm		
Enterprise value	246		
Market capitalisation	210		
Free float	210		
3m average volume	0.5		
Performance (%)			
	1m	3m	12m
Absolute	27%	40%	75%
Rel. Sector	28%	44%	67%
Rel. MSCI SMID	33%	53%	75%
12m Hi/Lo (EUR) : 42.8 -5% / 19.5 +108%			
CAGR			
	2017/2021	2021/2024	
EPS restated	NC	58%	
CFPS	NC	64%	



Price (yearly avg from Jun. 17 to Jun. 21)

PER SHARE DATA (EUR)

	Jun. 17	Jun. 18	Jun. 19	Jun. 20	Jun. 21	Jun. 22e	Jun. 23e	Jun. 24e	Jun. 25e
No of shares year end, basic, (m)	5,065	5,065	5,151	5,156	5,164	5,164	5,164	5,164	5,164
Avg no of shares, diluted, excl. treasury stocks (m)	5,065	5,065	5,151	5,156	5,158	5,164	5,164	5,164	5,164
EPS reported, Gaap	(0.46)	(0.25)	0.16	0.02	0.05	1.46	7.08	5.63	5.76
EPS company definition	(0.46)	(0.25)	0.16	0.02	0.05	1.46	7.08	5.63	5.76
EPS restated, fully diluted	(0.46)	(0.25)	0.16	0.02	0.05	1.46	7.08	5.63	5.76
% change	NC	45.3%	NS	(87.1%)	151.9%	NS	384.5%	(20.5%)	2.4%
Book value (BVPS) (a)	10.3	10.5	10.5	10.5	10.6	12.0	19.1	24.7	30.5
Net dividend	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STOCKMARKET RATIOS

	Jun. 17	Jun. 18	Jun. 19	Jun. 20	Jun. 21	Jun. 22e	Jun. 23e	Jun. 24e	Jun. 25e
P / E (P/ EPS restated)	NC	NC	86.3x	NS	NS	27.8x	5.7x	7.2x	7.0x
P / E relative to MSCI SMID	NC	NC	497%	NS	NS	170%	39%	53%	59%
P / CF	NC	NC	23.9x	73.5x	34.3x	20.9x	4.5x	5.3x	4.7x
FCF yield	(16.7%)	(7.2%)	(1.9%)	(2.0%)	(3.8%)	(7.3%)	8.7%	1.6%	13.1%
P / BVPS	1.58x	1.79x	1.34x	1.59x	1.83x	3.37x	2.12x	1.64x	1.33x
Net yield	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Payout	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
EV / Sales	24.11x	16.03x	10.99x	13.07x	11.79x	9.88x	3.24x	3.26x	2.49x
EV / Restated EBITDA	NS	NS	38.2x	97.2x	41.3x	16.9x	4.1x	4.5x	3.6x
EV / Restated EBITA	NS	NS	62.3x	NS	85.1x	21.4x	4.5x	5.5x	4.7x
EV / NOPAT	NS	NS	83.0x	NS	NS	28.5x	6.0x	7.4x	6.3x
EV / OpFCF	NS	NS	NS	NS	NS	NS	7.7x	15.5x	5.1x
EV / Capital employed (incl. gross goodwill)	1.3x	1.5x	1.2x	1.3x	1.5x	2.3x	1.8x	1.5x	1.2x

ENTERPRISE VALUE (EURm)

	Jun. 17	Jun. 18	Jun. 19	Jun. 20	Jun. 21	Jun. 22e	Jun. 23e	Jun. 24e	Jun. 25e
Market cap	83	95	73	86	100	210	210	210	210
+ Adjusted net debt	4	10	12	16	20	35	17	14	(13)
+ Other liabilities and commitments	4	4	4	4	4	4	4	4	4
+ Revalued minority interests						0			
- Revalued investments	1	2	2	3	3	3	3	3	3

P & L HIGHLIGHTS (EURm)

	Jun. 17	Jun. 18	Jun. 19	Jun. 20	Jun. 21	Jun. 22e	Jun. 23e	Jun. 24e	Jun. 25e
Sales	4	7	8	8	10	25	70	69	79
Restated EBITDA (b)	(2)	(1)	2	1	3	15	56	50	54
Depreciation	(0)	(2)	(1)	(1)	(2)	(3)	(5)	(9)	(13)
Restated EBITA (b)	(3)	(3)	1	(0)	1	11	51	41	42
Reported operating profit (loss)	(3)	(3)	1	(0)	1	11	51	41	42
Net financial income (charges)	(0)	(0)	(1)	(1)	(1)	(1)	(2)	(2)	(2)
Affiliates									
Other									
Tax	1	2	(0)	1	0	(3)	(12)	(10)	(10)
Minorities	0	0	0	0	(0)	(0)	0	0	0
Net attributable profit reported	(2)	(1)	1	0	0	8	37	29	30
Net attributable profit restated (c)	(2)	(1)	1	0	0	8	37	29	30

CASH FLOW HIGHLIGHTS (EURm)

	Jun. 17	Jun. 18	Jun. 19	Jun. 20	Jun. 21	Jun. 22e	Jun. 23e	Jun. 24e	Jun. 25e
EBITDA (reported)	(2)	(1)	2	1	3	15	56	50	54
EBITDA adjustment (b)	0	0	0	0	0	0	0	0	0
Other items	1	0	0	0	0	1	1	1	1
Change in WCR	(2)	1	(0)	(1)	2	0	0	0	0
Operating cash flow	(4)	(0)	2	1	5	16	57	51	56
Capex	(10)	(7)	(4)	(2)	(9)	(25)	(28)	(37)	(17)
Operating free cash flow (OpFCF)	(14)	(7)	(2)	(2)	(4)	(10)	29	14	39
Net financial items + tax paid	(0)	(0)	0	(0)	(0)	(5)	(11)	(11)	(11)
Free cash flow	(14)	(7)	(1)	(2)	(4)	(15)	18	3	27
Net financial investments & acquisitions	(0)	0	(0)	0	(0)	0	0	0	0
Other	0	1	(1)	(2)	(0)	0	0	0	0
Capital increase (decrease)	0	0	0	0	0	0	0	0	0
Dividends paid	0	0	0	0	0	0	0	0	0
Increase (decrease) in net financial debt	14	6	3	3	5	15	(18)	(3)	(27)
Cash flow, group share	(1)	(1)	3	1	3	10	46	40	44

BALANCE SHEET HIGHLIGHTS (EURm)

	Jun. 17	Jun. 18	Jun. 19	Jun. 20	Jun. 21	Jun. 22e	Jun. 23e	Jun. 24e	Jun. 25e
Net operating assets	75	75	79	81	90	112	135	162	166
WCR	(8)	(3)	(3)	(2)	(7)	(7)	(7)	(7)	(7)
Restated capital employed, incl. gross goodwill	66	71	75	78	83	105	127	155	159
Shareholders' funds, group share	52	53	54	54	55	62	99	128	158
Minorities	0	0	0	(0)	(0)	0	(0)	(0)	(0)
Provisions/ Other liabilities	11	10	11	12	11	11	15	16	18
Net financial debt (cash)	4	10	12	16	20	35	17	14	(13)

FINANCIAL RATIOS (%)

	Jun. 17	Jun. 18	Jun. 19	Jun. 20	Jun. 21	Jun. 22e	Jun. 23e	Jun. 24e	Jun. 25e
Sales (% change)	NC	80.9%	19.0%	(0.7%)	30.3%	143.2%	182.0%	(2.0%)	15.0%
Organic sales growth									
Restated EBITA (% change)	NS	3.6%	NC	NC	NC	NC	340.2%	(19.8%)	2.4%
Restated attributable net profit (% change)	NC	45.3%	NC	(87.1%)	152.0%	NC	384.5%	(20.5%)	2.4%
Personnel costs / Sales	NC	NC	NC	NC	NC	NC	NC	NC	NC
Restated EBITDA margin	(65.4%)	(10.9%)	28.8%	13.5%	28.6%	58.4%	79.7%	72.5%	68.7%
Restated EBITA margin	(78.5%)	(41.8%)	17.6%	(1.8%)	13.9%	46.2%	72.1%	58.9%	52.5%
Tax rate	NC	NC	4.2%	NC	NC	25.0%	25.0%	25.0%	25.0%
Net margin	(63.2%)	(19.1%)	10.6%	0.6%	2.9%	30.5%	52.0%	42.2%	37.5%
Capex / Sales	278.7%	100.3%	50.1%	30.6%	88.3%	101.9%	39.4%	53.1%	21.3%
OpFCF / Sales	(374.9%)	(102.1%)	(22.1%)	(20.4%)	(36.6%)	(39.2%)	41.9%	21.1%	48.9%
WCR / Sales	(222.0%)	(52.3%)	(43.0%)	(29.3%)	(69.9%)	(28.7%)	(10.2%)	(10.4%)	(9.0%)
Capital employed (excl. gdw / intangibles) / Sales	NC	412.5%	388.4%	422.6%	362.9%	238.9%	116.5%	158.4%	142.7%
ROE	(4.4%)	(2.4%)	1.6%	0.2%	0.5%	12.1%	37.0%	22.7%	18.9%
Gearing	7%	18%	23%	29%	37%	57%	17%	11%	(9%)
EBITDA / Financial charges	NC	NC	4.6x	2.0x	2.6x	10.7x	29.3x	26.6x	28.6x
Adjusted financial debt / EBITDA	NC	NC	5.4x	14.8x	6.9x	2.4x	0.3x	0.3x	NC
ROCE, excl. gdw / intangibles	(9.5%)	(7.6%)	3.4%	(0.3%)	2.9%	14.5%	46.4%	27.9%	27.6%
ROCE, incl. gross goodwill	(3.3%)	(2.9%)	1.4%	(0.1%)	1.3%	8.2%	29.8%	19.7%	19.6%
WACC						4.5%	4.9%	4.9%	4.9%

Latest Model update: 15 Mar. 22

(a) Intangibles: EUR45.60m, or EUR9 per share. (b) adjusted for capital gains/losses, exceptional restructuring charges, capitalized R&D; EBITA also adjusted for impairments and am. of intangibles from M&A

(c) after EBITA adjustments and financial result/tax adjustments, (\*) In listing currency, w. div. reinvested