CDC IXIS

CAISSE DES DÉPÔTS ET CONSIGNATIONS

GROUPE CAISSE D'EPARGNE

A NEW TYPE OF PUBLIC-PRIVATE INITIATIVE

FOR ENVIRONMENT & ENERGY EFFICIENCY

UNECE

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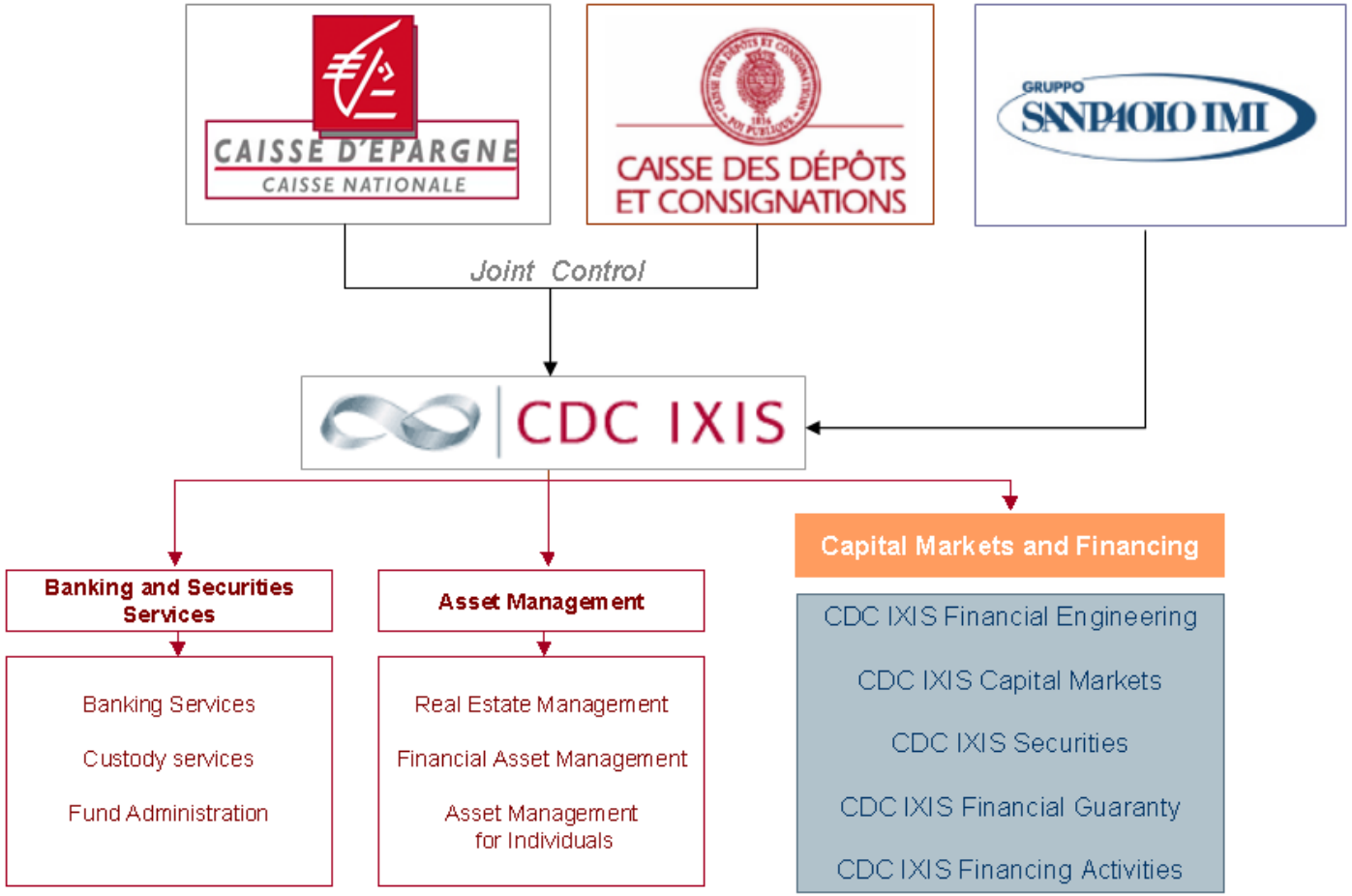
GENEVA – 26/05/2004

CDC IXIS:
A CORPORATE & INSTITUTIONAL BANK



1. SETTING UP THE FUND
2. STRUCTURE FOR THE INVESTORS IN THE FUND
3. THE MARKET TARGET FOR THE FUND
4. FINANCING A PROJECT
5. FUND MANAGEMENT
6. CONCLUSION

1 - FIDEME: the target

- **Answering financing needs for quasi-equity dedicated to project companies or companies themselves in the sector of Environment & Renewable Energy with the following characteristics:**
  - **financial institutions have a limited appetite: they are risk adverse to this sector which usually lacks sponsor equity**
  - **public subsidies are rare**

- **Structuring a financial product while arbitrating between public and private characteristics:**
  - **public : innovation, risk participation**
  - **private: risk adverse, return on equity.**

FIDEME is a public-private initiative, developing a new financing concept. This fund has been approved by the E.U.

1 - FIDEME: key points

- As a public investor, ADEME (French Environmental Bureau) has accepted taking more risks without the consequent rewards. However, ADEME earns more than through a subsidy mechanism.

- The private investors brought most of the investment in the fund but they are secured by the junior position of the public investor. In addition, investing in the fund is attractive for tax purposes. However:
  - investors' remuneration is capped
  - the product is illiquid
  - potential additional gains are shared with ADEME.

1 - From the subsidies to the PPP: the enhanced leverage funds structure

- Amortizing public funds have been injected into a financial vehicle allowing high leverage: 15M€ of public funds will link to 300M€ of investments in renewable energy projects

- Financial institutions have invested in the fund which was subscribed in 3 months thanks to a European public auction for the fixing of the remuneration

- FIDEME grants mezzanine financing to the project companies in order to facilitate the sourcing of senior debt.

1 - FIDEME sponsors

- **Public partners:**

- **Agence de l'Environnement et de la Maîtrise de l'Énergie: Public agency**

- **Private partners:**

Conception / Underwriting

- **The investment bank of the Group Caisse des dépôts**

- **Group San Paolo IMI**

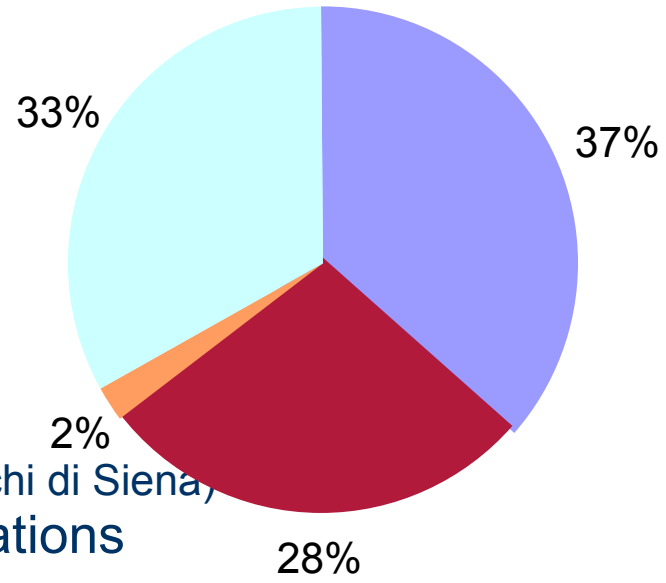
- **Management fund company:**

CDC IXIS Environnement & Infrastructures

- **100 % owned by CDC IXIS**
- **COB nr and authorization :**

1 - Financing institutions - partners of FIDEME

- **Investment Banks:**
  - **Banca OPI (San Paolo IMI)**
  - **CDC IXIS**
- **Investment funds**
- **ADEME**
- **Retail banking groups:**
  - Banca Verde (Groupe Monte Paschi di Siena)
  - Caisse des dépôts et consignations
  - Banque Populaire Group
  - Caisse d'Epargne Group



➔A complete structure of the project financing with partner banks can be offered: senior debt and/or leasing.

2 - FIDEME in brief

Is dedicated to:

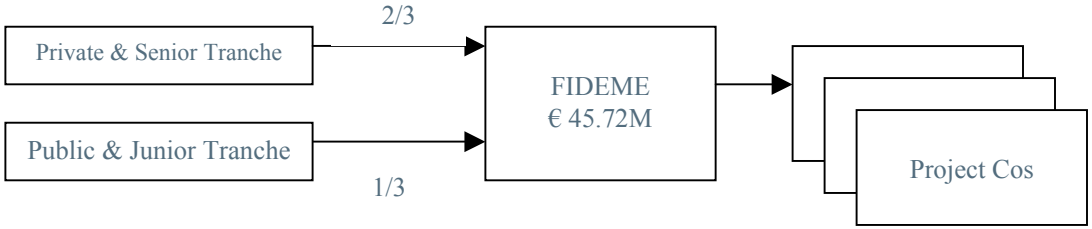
- **making the financing of several €m projects easier**
- **bringing an intermediary financing between equity and debt**
- **financing projects based on proven technologies and improving the environment.**

Is not dedicated to:

- *bringing equity*
- *financing projects with non-proven technology*
- *granting subsidies but is dedicated to financing.*

2 - A financing structure adapted to a public - private partnership

- A €45,720,000 fund totally underwritten by:
  - ADEME: € 15,24m, 1/3 of the fund (junior)
  - European investors: € 30,48m, 2/3 of the fund (senior).



- Risk mitigation for investors: € 15,24m vs. € 30,48m.
- High leverage potential on public funds: €15m vs. €300m total investments.
- Approved by the EU with respect to State aid on December 20th 2001.

2 - A standard structure: a « FCPR » (Fonds Commun de Placement à Risques)

- **Sharing risk and remuneration between public and private investors:**

  - ✓ **A shares → ADEME:**
    - **Exclusively underwritten by ADEME**
    - **Purchased and remunerated after B shares.**

  - ✓ **B shares → Banks and financial institutions:**
    - **Reserved for qualified investors**
    - **Priority in remuneration and purchase.**

- **Assets of the fund: convertible bonds.**

- **Standardized documentation provided by the management fund company, CDC IXIS ENVIRONNEMENT & INFRASTRUCTURES.**

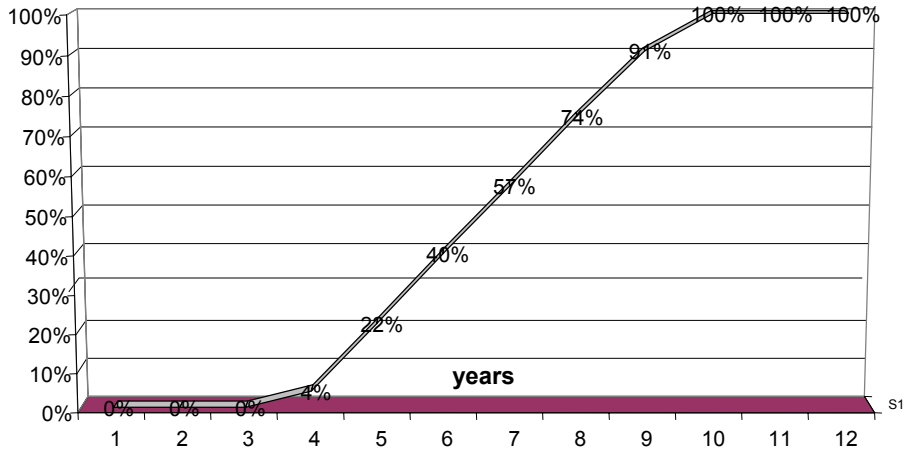
2 - Cash flows in and out of FIDEME

Payment ranking to secure private investors:

- ✓ **Principal and interest from the project companies**
- ✓ **Management fees for CDC IXIS E&I**
- ✓ **Interest paid on B shares**
- ✓ **Reserve account**
- ✓ **Re-purchase of B shares**
- ✓ **Extra interest potentially paid to CDC IXIS E&I**
- ✓ **Re-purchase of A shares.**

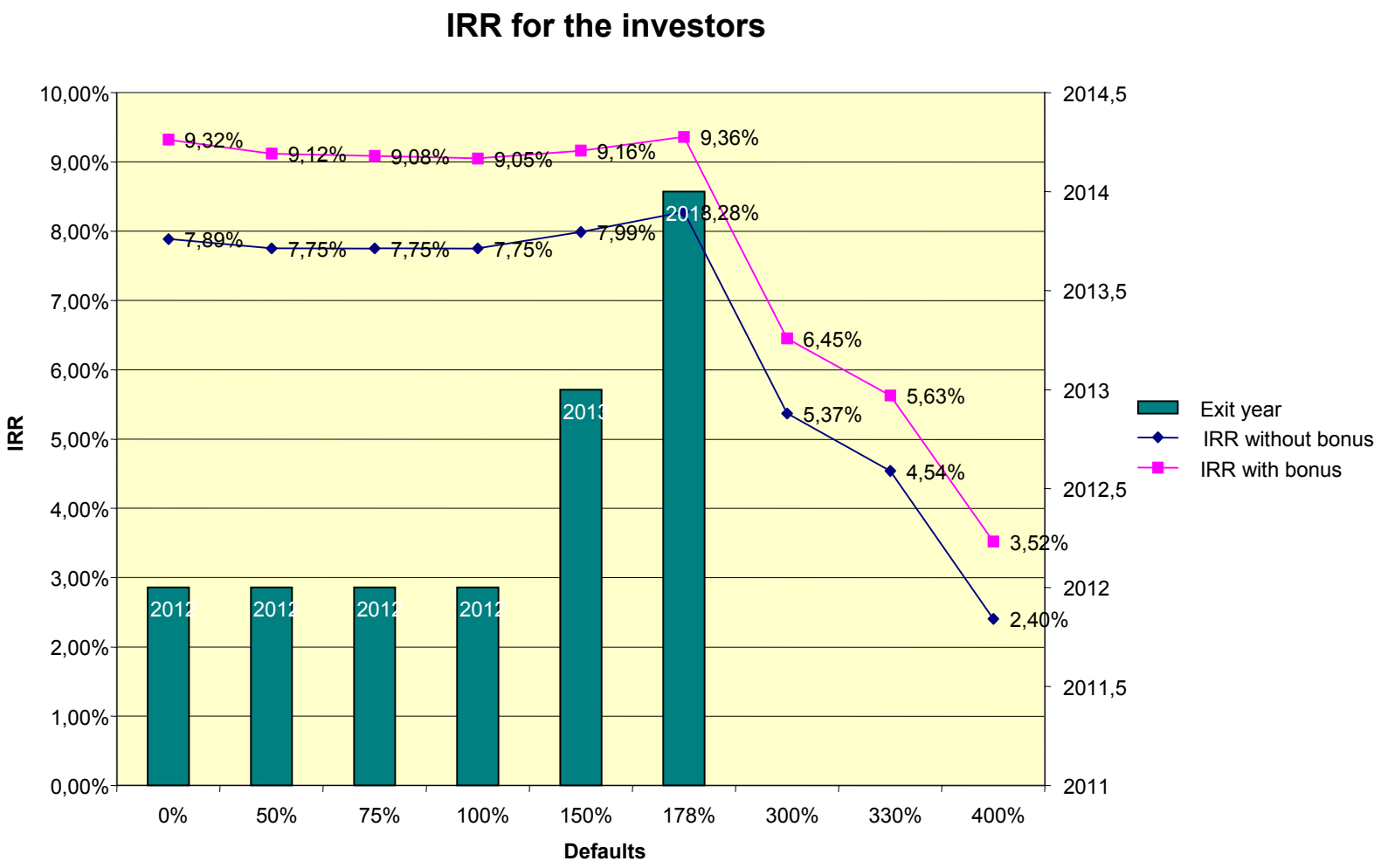
2 - Share re-purchase programme for private investors

- **Re-purchase programme of B shares is progressive. It reflects the bond structure of the project companies financing: 10 years according to the available cash flows.**



- **Remuneration paid on B shares is comparable to one of a bond issue:**
  - **Swap Euribor 10 Y + 290 bp margin: 7,365%**
  - **Non liquidity premium in case the repurchase programme of B shares is not on schedule**
  - **Additional upside when and if converting bonds (IRR + 1% to 1,4%).**

2 - Projection of financial results



3 - Targeted sectors have a definite future but are very capital intensive

- **Renewable energies : hydraulic, wind power, biomass, geothermal, solar…**
  - ✓ **Still scarce in France besides hydro**
  - ✓ **Supported by national and European objectives**
  - ✓ **The national power utility (EdF) has a purchase obligation at attractive tariffs**
  - ✓ **Contribute to the reduction of CO2 emissions.**

- **Waste processing: recycling, using methane…**
  - ✓ **Encouraged by regulatory limitations and EU directives.**

- **Equipment and asset manufacturers in the field of renewable energies (10% of the fund).**

3 - Identified market capital needs are wider than the fund capacity

In M€	*Financing needs in sectors eligible to the FIDEME fund*	*25% of the financing needs*	*3 year planed investments (5% of 25%)*	*3 year planed investments (in%)*
Renw Energies Not counting biomass	633 M€	*158 M€*	31 M€	*69%*
Waste	75 M€	*19 M€*	4 M€	*8%*
Biomasse	123 M€	*31 M€*	6 M€	*13%*
Manufactures	23 M€	*5 M€*	5 M€	*10%*
Total	**854 M€**	***213 M€***	**46 M€**	***100%***

sources : ADEME/Iéna Environnement.

- **FIDEME finances up to 25% of a project.**

3 - Eligible projects: profile and context

Project size:

- **Up to €25m: not eligible for classical project finance methods.**

Project sponsors:

- **Smaller companies with little equity to invest.**

Project financing:

- **FIDEME will support projects with little equity available.**

4 - Principal characteristics of a FIDEME financing

- **Bond issue:**
  - **Maximum 10 years**
  - **One year grace period allowed.**
- **Investors' principal is adjusted to project companies' cash-flows.**
- **FIDEME bond financing is junior to the project company's bank debt.**
- **Project company pays back FIDEME at a rate close to a senior debt financing for a quasi-equity participation.**

4 - FIDEME brings financing complementary to senior debt

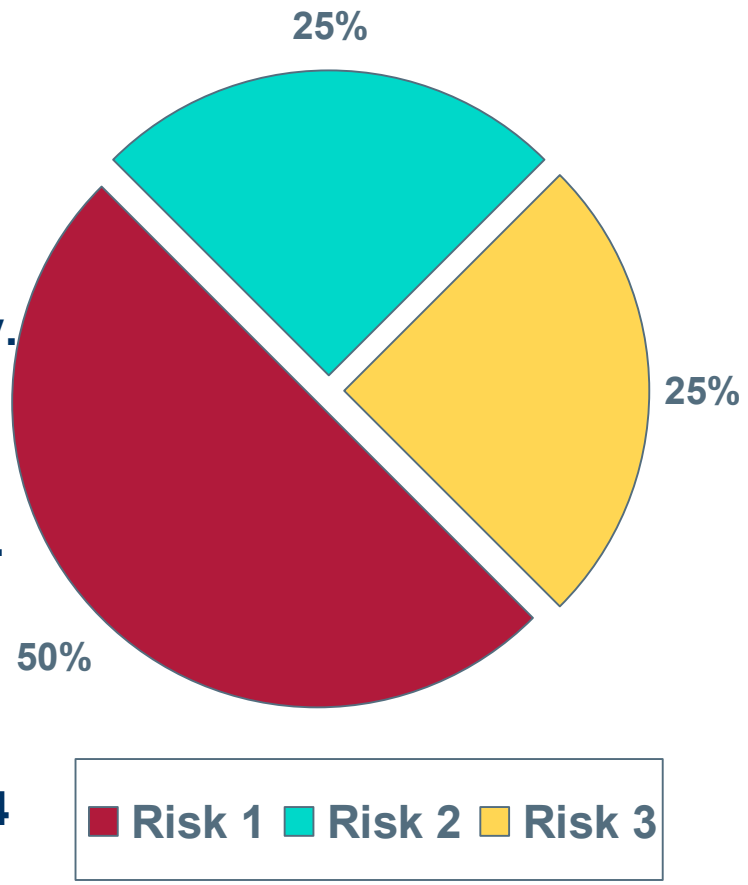
- Financial institutions and banks compare FIDEME funding to quasi-capital:
  - They benefit from a higher level in the security package ranking
  - The repayment of their loan or lease has priority ranking.

- FIDEME has the following positive impacts:
  - It reduces debt or lease amount
  - It enhances the security package for senior lenders or lessors.

- Project sponsors are therefore encouraged in their project developments:
  - « WACC » is reduced
  - IRR is enhanced.

4 - Investment policy is guided by a pre-determined risk management structure

- **Risk 1** (low level):
  - No or few counterparty risks
  - Proven technology
  - Professional project sponsors
  - Secured source of energy.
- **Risk 2** (medium)
  - Lower quality than above.
- **Risk 3** (high level)
  - Lower quality than in 2
  - Risk taken on one of the 4 concepts mentioned in 1.



4 - Quasi-equity at the price of senior debt: enhanced by the PPP concept

- **Indicative margins are calculated with a margin over a base of 4,65% according to the risk and the maturity:**

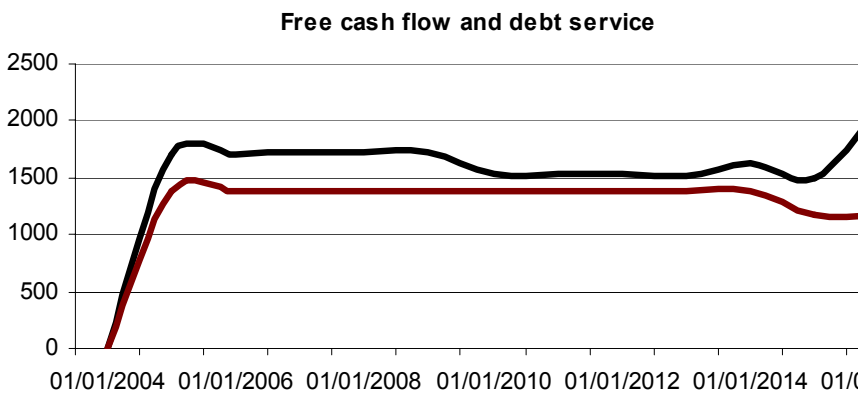
Offered margins according to the risk level			
Maturity	**Risk 1**	**Risk 2**	**Risk 3**
10 y	2,30%	3,10%	3,80%
9 y	2,10%	2,90%	3,60%
8 y	1,90%	2,70%	3,40%
7 y	1,80%	2,60%	3,30%

- **The proposed remuneration will come out between 6,5% and 9%.**

4 – Case study presentation for a wind farm

Data	
Power (MW)	11,50 MW
Energy output / year	25 875 Mwh
Working hours	2 250 h
Sale price indexing	1,5%
Provision for depreciation	15 years

Financial data	
Fideme	
Amortization	Sliding
Maturity	10 years
Interest rate	7,0%
Mezzanine DSRA	6 months
Senior Debt	
Debt type	Loan
Amortization	Sliding
Maturity	12 years
Interest rate	5,5%
Senior DSRA	6 mois



Price c€ /kW/h (no K&L indexation)	
Years 1 to 5	8,38
Years 6 to 10	7,37
Years 11 to 15	7,37
Sale price indexing (L)	1,5%
Year K Factor	2003
Year 1 with K&L indexation	8,487

4 – Case study: economy of the project

DATA								
Case	% Equity	% FIDEME	FIDEME interest rate	Senior interest rate	Price cut	Residual value	Senior Maturity	
No Fideme - 1 250 K€/MW	**26,5%**	-	7,0%	5,5%	-	0	12	
No Fideme - 10% ROE	**21,0%**	-	7,0%	5,5%	**-9,7%**	0	12	
Fideme - ROE Optimization	**18,5%**	**10,0%**	7,0%	5,5%	-9,7%	0	12	
Avec Fideme - Senior interest rate cut	**18,0%**	10,0%	7,0%	**5,3%**	-9,7%	0	12	
Fideme - Senior IR cut& ADSCR 1,15	**14,5%**	10,0%	7,0%	5,3%	-9,7%	0	12	
Fideme - Senior IR cut& ADSCR 1,15&Maturity 13 years	**10,0%**	10,0%	7,0%	5,3%	-9,7%	0	**13**	
Senior IR cut& ADSCR 1,15&13 years&Residual value	10,0%	10,0%	7,0%	5,3%	-9,7%	**700**	13	

RESULTS								
Case	Project amount	FIDEME	K€/MW	ADSCR Senior	K€/MW	ADSCR Global	Project IRR	Return On Equity
No Fideme - 1 250 K€/MW	15 471	0	**1 250**	**1,30**	1 250	N/A	8,3%	**6,5%**
No Fideme - 10% ROE	14 045	0	**1 129**	1,30	1 129	N/A	**10,0%**	**10,0%**
Fideme - ROE Optimization	14 103	1 410	1 129	**1,43**	1 129	**1,20**	10,0%	**10,6%**
Avec Fideme - Senior interest rate cut	14 086	1 409	1 129	1,44	1 129	**1,20**	10,0%	**11,0%**
Fideme - Senior IR cut& ADSCR 1,15	14 133	1 413	1 129	1,37	1 129	**1,15**	10,0%	**12,5%**
Fideme - Senior IR cut& ADSCR 1,15&Maturity 13 years	14 194	1 419	1 129	1,38	1 129	**1,15**	10,0%	**15,5%**
Senior IR cut& ADSCR 1,15&13 years&Residual value	14 194	1 419	1 129	1,38	1 129	**1,15**	10,0%	**16,0%**

5 - An organised investment process

- **Phase 1: CDC IXIS E&I checks the eligibility of the projects**
  - ✓ **then ADEME gives its opinion.**

- **Phase 2: CDC IXIS E&I analyses the projects according to a strict project financing risk analysis:**
  - ✓ **CDC IXIS E&I proposes a rate after having classified the project into one of the risk categories**
  - ✓ **then decides on the investment.**

Conclusion: FIDEME is a new financing product dedicated to the promotion of the environment

- For investors in the fund:
  - privileged access to new and expanding sectors
  - secured by a public-private partnership.

- For project sponsors:
  - access to mezzanine financing
  - leverage on equity in order to optimize senior debt or leasing.

- For public partners:
  - limits the grant of subsidies
  - high leverage in term of projects financed compared to the €45M contributed by FIDEME.

Conclusion (2): FIDEME: an encouraging adventure

- **FIDEME has been oversubscribed in 3 months showing the interest of investors for green paper.**

- **FIDEME has received requests amounting to €400m of investments since it was launched.**

A similar structure is being studied at the European level.

The core management and team

« It is not worth wanting to reach the moon when you are not able to make your life enjoyable on earth. »

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- ✓ Managing Director & Chief Investment Officer of CDC Ixis Environment & Infrastructures, PascaleThévenoux is member of the Investment Committee of the FIDEME mezzanine investment Fund.

- ✓ Pascale is a Vice President at CDC IXIS, Financial Engineering Department.
- ✓ She graduated with EDHEC, one of the leading Administration Business School.

- ✓ Pascale cumulates more than 15 years experience in structured asset and project finance. After a year of study in the United States and a first experience in the Mergers & Acquisitions Department of Banque Indosuez Tokyo-Japan, Pascale became Financial Analyst at Banque Indosuez, covering South Africa. In 1989, she joined the Real Estate Group and specialized in leasing operations to corporates and small and medium size companies. In 1994, she became Senior Financial Analyst for the Structured and Asset Finance Group. Since 1997, she focused on leveraged asset finance operations for industrial corporates as Senior Structured Finance Manager. She joined CDC Ixis' Asset and Debt Finance Department in 2000 and the Financial Engineering Department the following year as project manager. She currently manages two large international projects she originated, on top her role in FIDEME.

- ✓ French citizen, speaks fluent English, has a strong practical knowledge of German, possesses notions of Japanese for having lived and worked there.