A new approach to project financing

in high risk & complex environments

Case study – financing a solar power project in Africa

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What is FlexUp ?

A comprehensive **ecosystem** designed to help you start and growth your businesses through:

An innovative **economic model**:

- promoting **cooperation** among all your stakeholders
- through a **common remuneration system**

An array simple yet powerful **business tools**, including:

- a solid **contractual framework**,
- a comprehensive **business management app**

A **network** of business partners:

- offering various **professional services**
- ready to invest in your project with our **flexible remuneration** system

FlexUp vs classic financing for solar projects in Africa

Classic	P5	**P50**	P95	Spread 5-95
Client savings, €/MWh	-	**-**	-	-
Bank IRR%	10%	**10%**	10%	-
Investor IRR%	5%	**18%**	33%	27%
Project IRR %	8%	**13%**	19%	11%

FlexUp	P5	**P50**	P95	Spread 5-95
Client savings, €/MWh	12%	**15%**	18%	7%
Bank IRR%	8%	**12%**	15%	7%
Investor IRR%	7%	**16%**	24%	17%
Project IRR %	8%	**13%**	17%	9%

In our simulation, PV project financing with FlexUp, instead of the classic financing approach would allow:

- 15% reduction in electricity price
- 10%→12% increase in returns for banks, with limted risk
- a significantly improved risk/return balance for investors
  - 18%→16% minimal reduction in expected return
  - 27%→17% significant reduction in spred between P5 and P95 scenarios

FlexUp financing provides significant benefits for all parties involved

Agenda

- **Simulation using the classic economic model**
- **Simulation using the FlexUp economic model**
- **Conclusions and next steps**

Case study presentation

Financing an innovative wind energy project

Key assumptions

Key figures: *(assumed at no risk)*

- Power: 100 MWc
- Capex: 1 €/Wp, 100 M€, all-in fixed price EPC contract
- Opex: 10 €/kWp.yr, all-in fixed price operations & maintenance
- Project lifetime: 25 years
- Electricity price: 100 €/MWh

Financial structure:

- Debt: 70% leverage at 10% interest rate over 15 years
- Min DSCR[1]: >1.3x @ P10[2]
- Equity: 30% financing with target IRR of 18% @P50[3]
- Long-term power purchasing agreement (PPA) with public utility at fixed electricity price

Risk analysis

Key unknowns: *(risk sensitivity)*

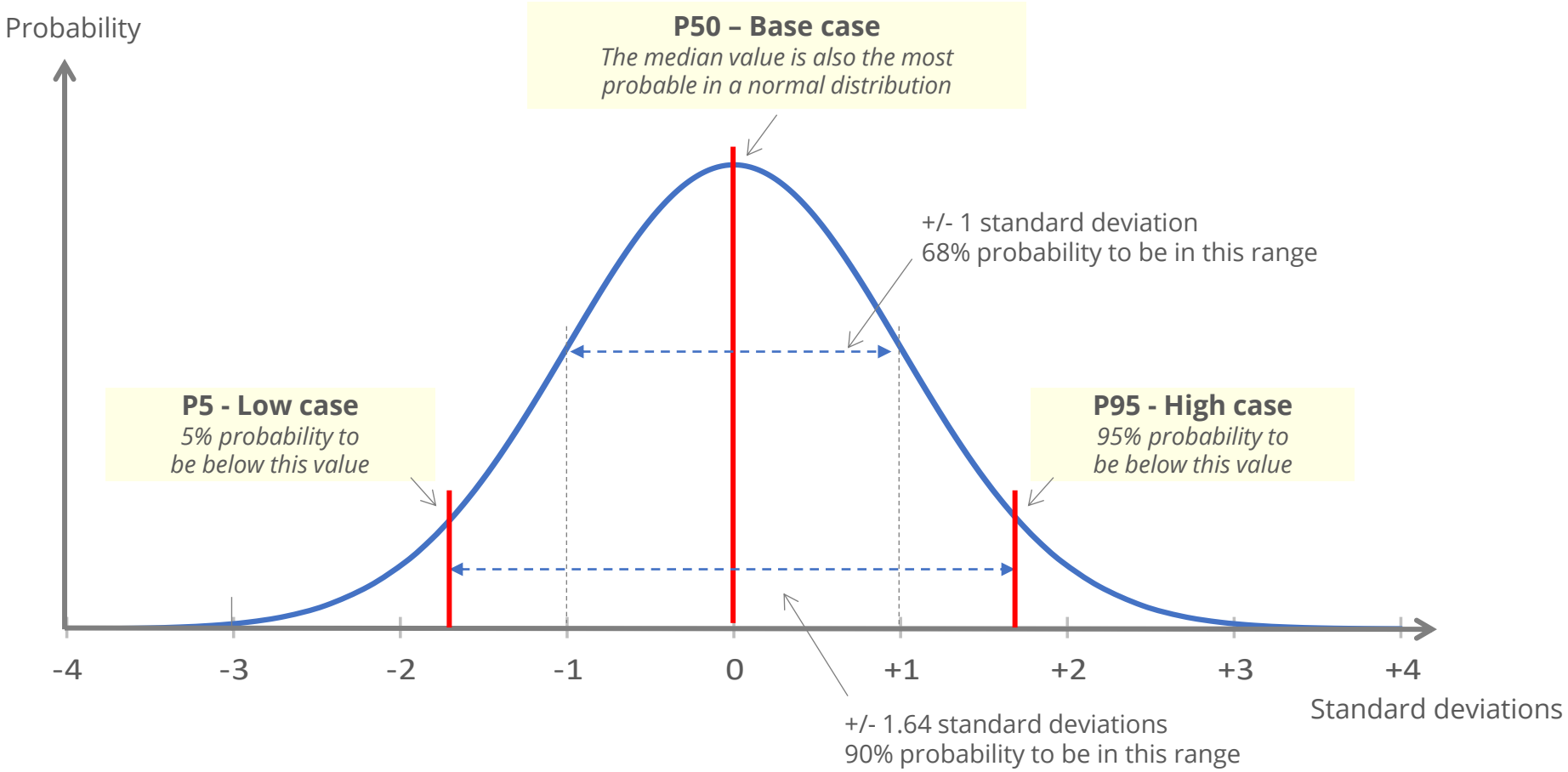
- Net energy yield: 1 500 Wh/W.yr
  - standard deviation: +/- 20% [3]
  - 90% probability range (P5-P95): 1 000 ~ 2 000 Wh/W.yr

Key results: *(in the classical financial model)*

Scenario	Energy yield Wh/W.yr	Equity IRR %	Debt min DSCR
P5	1 000	5%	1.20
P10	1 115	10%	1.32
P50	**1 500**	**18%**	**1.74**
P90	1 885	29%	2.16
P95	2 000	33%	2.28

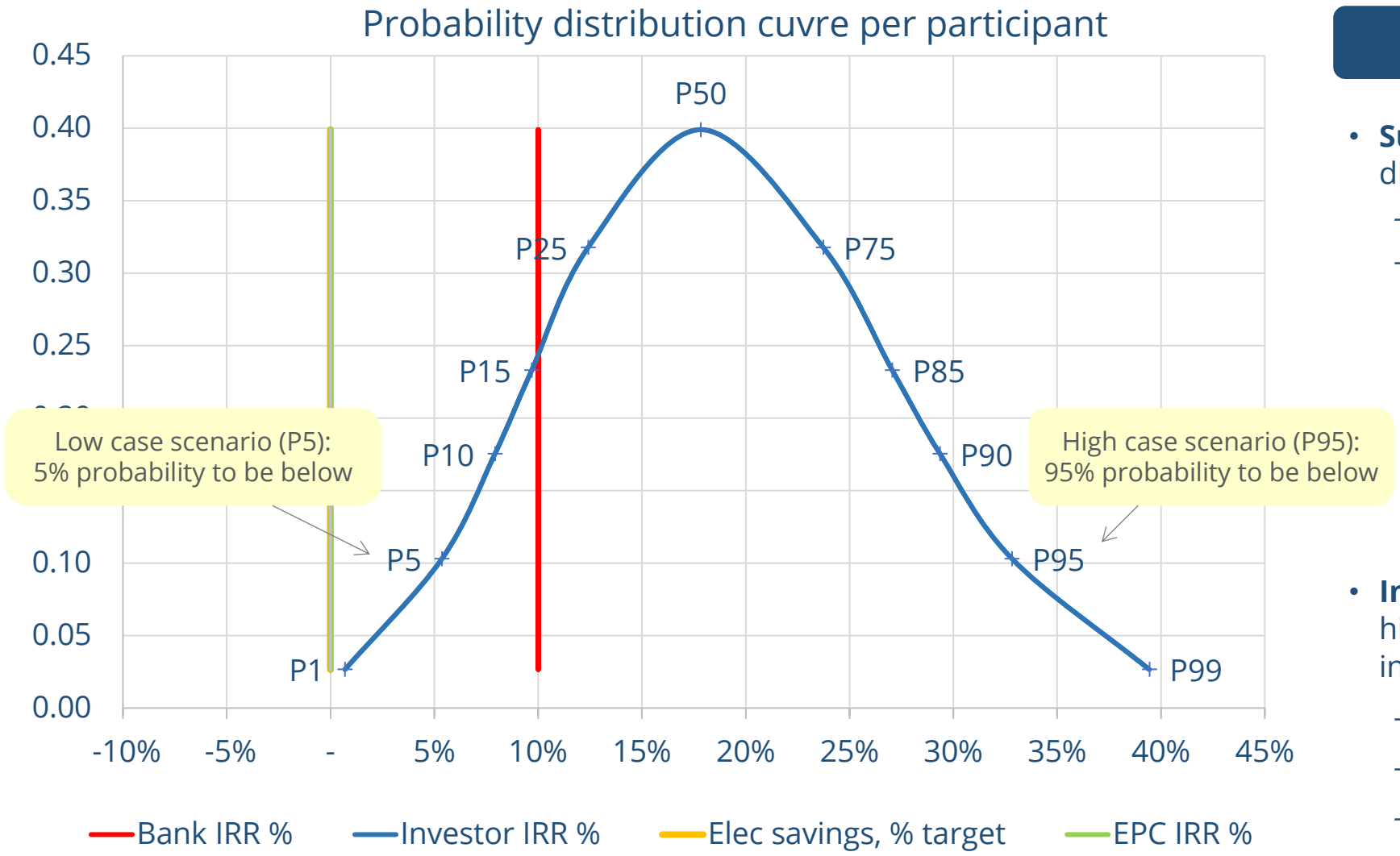
1) debt service coverage ratio = cashflow available for debt serve (CFADS) divided by debt service (DS). 2) P10 means that there is only a 10% probability to be below this value. 3) P50 is the median scenario.
4) To simplify the simulation, we assign all the risk/uncertainty onto the yield variable. In reality, this is a proxy indicator for all potential risks, such as delay, cost overruns, plant availability and performance, grid unavailability, political risk, etc. Actual variation of solar irradiation in only +/-5% on an annual basis.

We assume that unknowns have a normal distribution



For each unknown, we provide an estimate (average value), and an uncertainty (standard deviation)

Classic financing approach – investors alone take all the risks



Highlights

- **Suppliers, banks and clients** all have different and **fixed rémunérations**:
  - They take no risks.
  - In all scenarios, we have:
    - Bank return: 10%
    - Client electricity price: 100 €/MWh
    - EPC price: 1.0 €/Wp, does not invest in the project
    - O&M price: 10 €/kWp.yr
- **Investors alone take all the risks**, with a high uncertainty on their return on investment:
  - Low case (P5): 5%
  - Base case (P50): 18%
  - High case (P95): 33%

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FlexUp model overview

Key principles

- **Non-discrimination**: all participants are treated equally and have the same remuneration system. No distinction between different types of:
  - **participants**: managers, employees, investors, suppliers, clients…
  - **contributions**: work, capital, goods, services…
  - **remuneration**: salaries, purchases/sales, interests, dividends…
- **Flexibility**: participants choose how much risk they want to take, by splitting their remuneration over different **priority** levels
- **Rigour**: payments are made in a systematic way by order of priority: **base** is paid first, **flexible** next and **equity** last.
- **Preservation**: unpaid flexible **residue** is converted into equity.
- **Fairness**: profits and voting rights are based on the **contribution** and **risk** taken by each participant, measured using **tokens**.
- **Transparency**: all participants can see in real time how the cash is used and how much equity they have in the project.

Cash waterfall

Inflows

All cash inflows are treated equally, whether revenues, funding or subsidies.

Base
firm + preferred

Base outflows are paid first to all **participants**, regardless of the nature of their **contribution** and of the corresponding **remuneration**

Flexible
flex + superflex

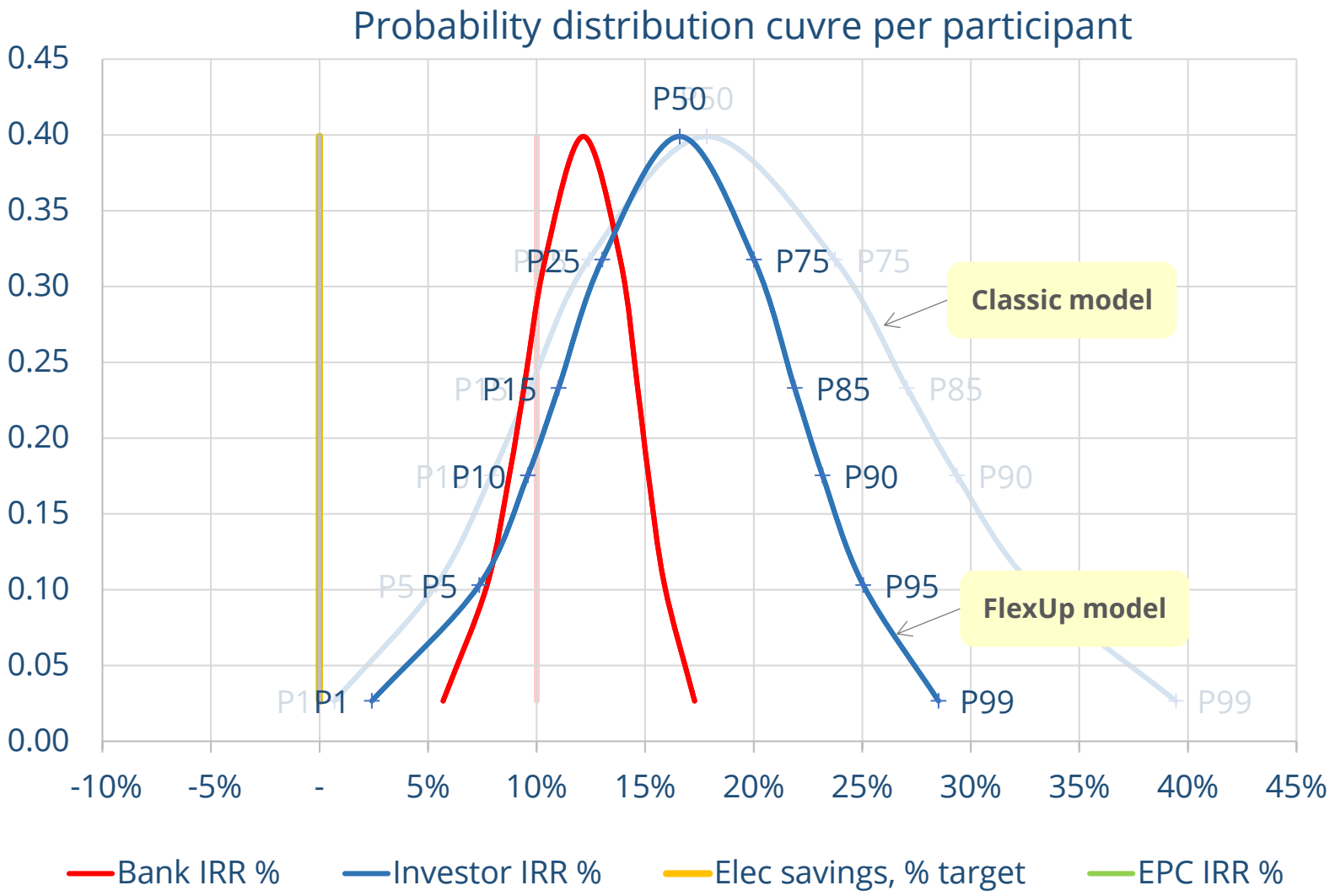
Flexible outflows are paid next, on a monthly basis, within the limits of available cash. If there is not sufficient available cash, all flexible is paid at the same rate *(eg: 60% to all participants)*. The residue is rescheduled or converted into equity**.**

Equity
credit + tokens

Equity is paid last, on an annual basis, from a portion of the net excess cash.

FlexUp: aligning interests to encourage **collaboration**

Case 1: risks are shared between **investors** and **banks**



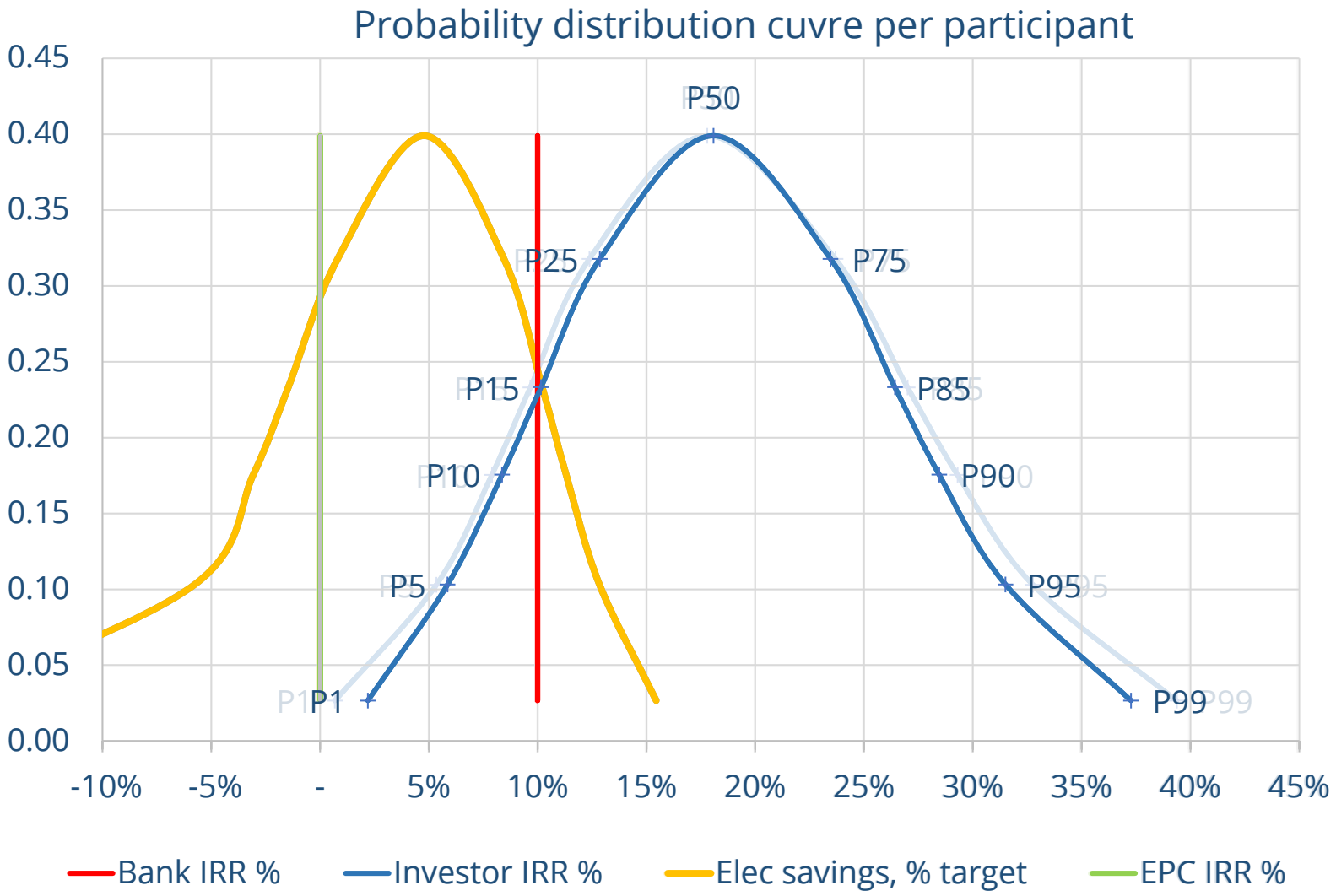
Highlights

- Risks are shared between banks and investors

Compared to the classic model:

- **Investors** have a lower risk profile with slightly reduced base return expecations:
  - Low case (P5): 7% *+2% vs 5%*
  - Base case (P50): 16% *-2% vs 18%*
  - High case (P95): 25% *-8% vs 33%*
- **Banks** take a bit more risk, but have higher expected returns:
  - Low case (P5): 8% *-2% vs 10%*
  - Base case (P50): 12% *+2% vs 10%*
  - High case (P95): 16% *+4% vs 10%*

Case 2: risks are shared between **investors** and **client**



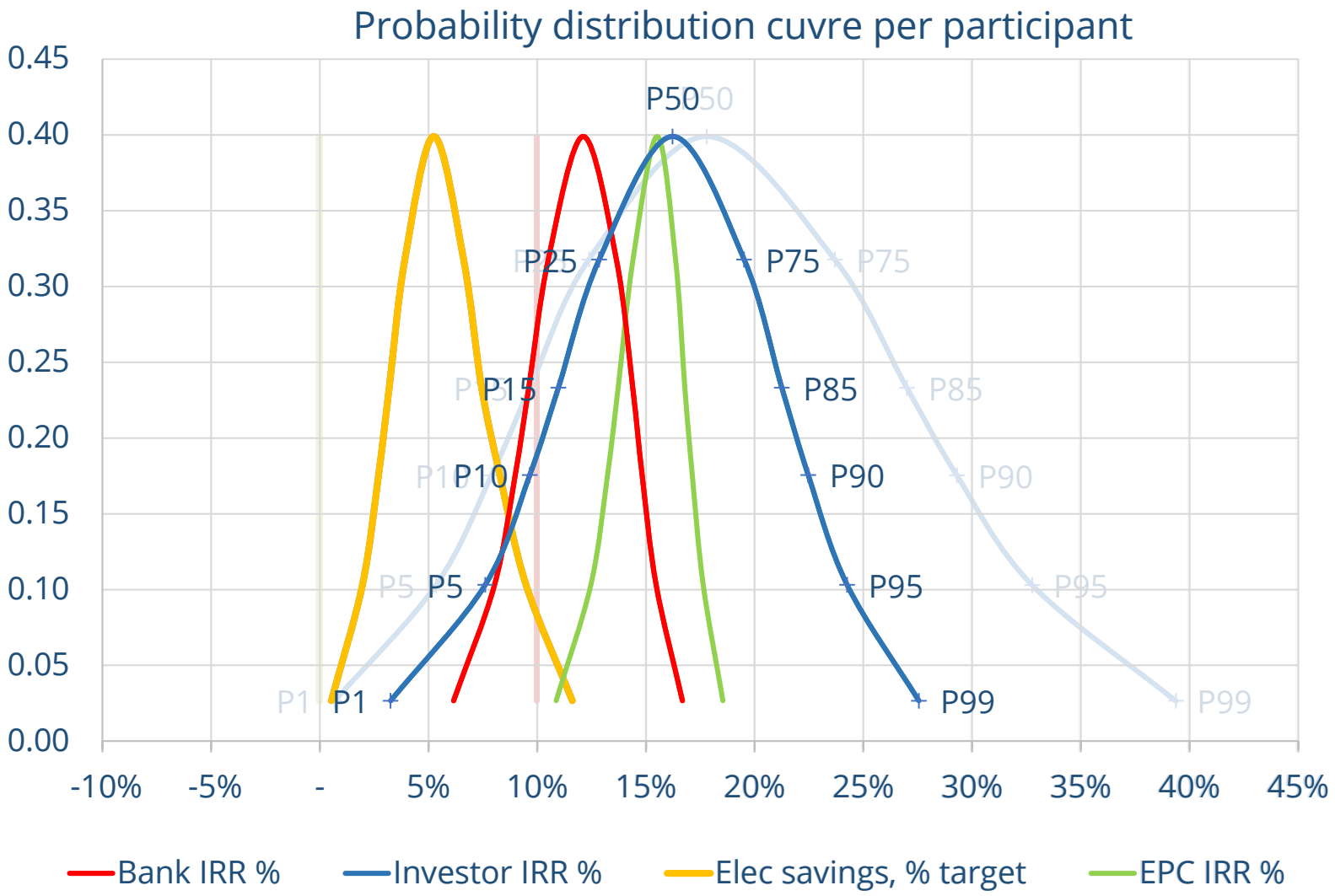
Highlights

- Risks are shared between client and investors

Compared to the classic model:

- **Investors** have a slightly lower risk profile with similar base return expecations:
  - Low case (P5): 6% *+1% vs 5%*
  - Base case (P50): 18% *+0.3% vs 18%*
  - High case (P95): 31% *-1% vs 33%*
- **Client** takes a bit of risk, but has a lower expected electricity price:
  - Low case (P5): 104 €/MWh *+4 vs 100*
  - Base case (P50): 95 €/MWh *-5 vs 100*
  - High case (P95): 87 €/MWh *-13 vs 100*

Case 3: risks are shared between **all participants**



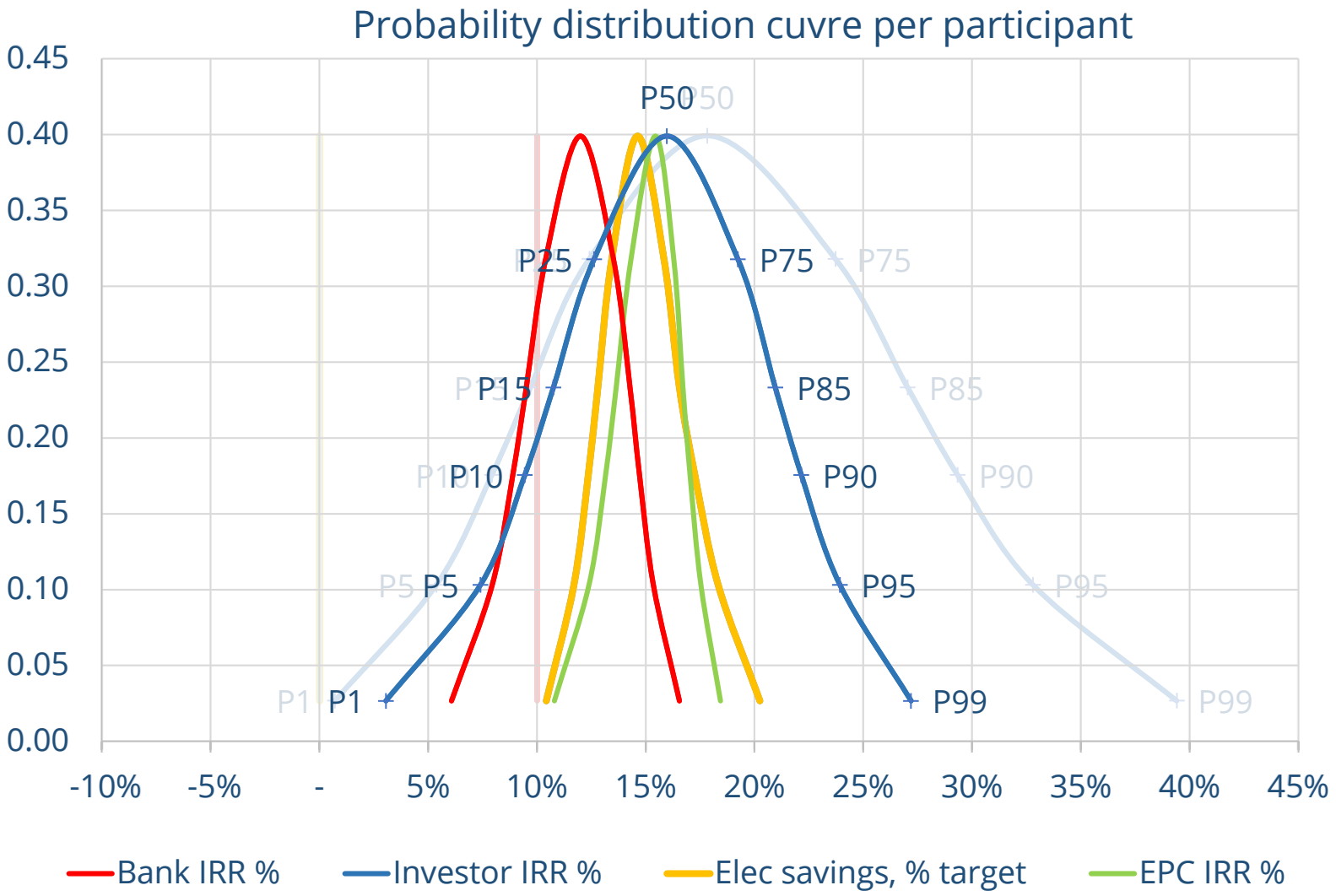
Highlights

- Risks are shared between all participants: client, EPC, O&M, banks and investors

Compared to the classic model:

- **Investors** have a much lower risk profile with slightly reduced base return expecations:
  - Low case (P5): 8% *+3% vs 5%*
  - Base case (P50): 16% *-2% vs 18%*
  - High case (P95): 24% *-9% vs 33%*
- EPC base return is 16%, with low risk
- Bank base return is 12%, with limited risk
- Client price is reduced in all cases, with expected elec price saving of 5%

Case 4: enhanced **collaboration** improves underlying project **profitability**



Highlights

- FlexUp is not just about **sharing risks**
- It's about enhancing **collaboration**, through a greater alignement of financial interest
- Greater collaboration means projects are more **successful** and **profitable**

If we assume a 10% yield increase:*

- **Investors** have a much lower risk profile with slightly reduced base return expecations:
  - Low case (P5): 7% *+2% vs 5%*
  - Base case (P50): 16% *-2% vs 18%*
  - High case (P95): 24% *-9% vs 33%*
- EPC base return is 15%, with low risk
- Bank base return is 12%, with limited risk
- Client price is reduced in all cases, with expected elec price saving of 15%

** in this simulation, yield is used as a proxy indicator of project performance. But greater collaboration can lead to lower investment & operating cost, higher plant updtime and efficiency, reduced development & construction time, etc.*

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FlexUp simulation analysis: key take aways

Improving risk/return prospects

- By sharking risks between all participants, the FlexUp model provides substantial benefits to all parties compared to the classic model:
  - **investors** reduce their risks without significantly reducing their returns expectations
  - **banks** can increase their returns expectation, with limited risks
  - **clients** can decrease their expected electricity price, with limited risks
  - **EPC** and **O&M** can increase their expected revenues, with limited risks

Additional benefits

- In addition to **allocating risks** more efficiently, FlexUp creates an **alignment of interes**t which leads to greater collaboration
- Enhanced **collaboration** leads to fundamental improvements in project performance:
  - reduced scope for conflicts, delays or project cancellation,
  - retaining and motivating all participants in the long run,
  - reducing friction and interface costs,
  - encougaring collective search for technical optimisation,
  - greater wealth for all parties ensure long-term loyalty, survival and capacity for investments on continuous improvement,
- Greater wealth distribution also provides indirect benefits in terms of reputation and relationship with local communities

FlexUp: greater **collaboration** improves outcome for **all participants**

Next steps

1. **Learn more about FlexUp**
   - check out out website: www.flexup.org
   - check out our frequently asked questions
   - ask us for more detailed documentation
   - ask us for a meeting to discuss FlexUp in more details

2. **Evaluate FlexUp for your project**
   - you provide us with high level summary of your project
   - we run a quick / high-level simulation
   - we review the results together to evaluate potential benefits for your project

3. **If the evaluation is positive, we can prepare the implementation together**
   - investigating feasibility
   - testing the interest of your key partners
   - running a detailed simulation
   - exploring specific legal, tax and financial implementation for your project with corresponding professional services partners (lawyers, accountants…)

We look forward to a FlexUp collaboration!