

MULTI-SOURCE FINANCING TO BOOST DEEP RENOVATIONS USING ENERGY EFFICIENCY SERVICES

BEST PRACTICE EXAMPLE FROM CZECHIA

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REFIN 

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DEEP RENOVATIONS - CZECH PILOTS COMBINE EPC WITH SUBSIDIES

> Deep renovations of buildings

- > European Green Deal: **a key initiative to drive energy efficiency** in the sector
- > Recovery plan, Renovation wave for Europe: dual ambition of energy gains and economic growth

> Deep renovations EPC projects do not include only technology measures but also **construction measures** with a long payback period => **additional financing is needed:**

- > **A) Client own resources** are used to co-finance the project
- > **B) Combining EPC with subsidies**
 - > Financing structure of the project must fulfil requirements of the State Environmental Fund (SEF) and rules for governmental bodies (if applicable)
- > **C) A+B**

> Two REFINE pilot applications in psychiatric hospitals in Czechia

- > have proved **it is possible to sell receivables from the EPCs providing deep renovations subsidized** by State Environmental Fund (SEF) from Operational Programme Environment (OPE)
- > It is possible only after months of negotiations on **SEF rules adjustments** for EPC projects
- > applies only to **public clients** who are eligible for OPE support

RESULTS FROM CZECH PILOT PROJECTS

- › => **Results in growing energy savings:**
 - › **growing interest** in these projects among providers – currently most of 20 EPCs in preparation are combined with subsidies
 - › **expanding demand among potential clients** as it is possible to obtain subsidies for EPCs
 - › **average size of the EPCs increased fourfold** from 1– 2 mil. EUR to 4–8 mil. EUR
- › => **Lessons learned for other countries:**
 - › Sale of receivables allow **SMEs as EPC providers to implement combinations with subsidies** (not just large companies)
 - › Combining EPC with subsidies enables to combine technology measures and constructions measures in **deep renovation** projects – otherwise possible only with own resources of the client
 - › Czech case provides example of **procurement procedure** which ensures the subsidies do not distort the energy efficiency market

SALE OF RECEIVABLES IN CZECHIA

- › EPC provider **sells off expected receivables** from its client **without recourse** to the EPC provider (= the seller of the receivables is not liable for a client's non-payment)
- › Arranged between **EPC provider and the bank** based on **well-established and standardised contractual arrangements**
- › **Private experienced ESCOs**
 - › sale of receivables removes obligations from ESCO's balance sheet, enabling financing new projects
 - › financial institution now assumes the credit risk of EPC client
- › **Private banks:** Československá obchodní banka, a. s. (ČSOB); Factoring of Komerční banka (KB)
 - › the bank bears only credit risk as the provider assumes the contractually agreed performance risks
 - › banks have had good experience with ESCOs and EPCs performance
- › **Mostly public clients** (government, regions, municipalities):
 - › clients are not required to use own resources or pay back the costs before end of the contract

ADJUSTMENT 1: ACCEPTABLE PAYMENT RULES: TRIPARTITE AGREEMENT BETWEEN CLIENT, ESCO AND THE BANK

- › Tripartite agreement among ESCO, bank and client
 - › replaced the **proof of cost reimbursement** by the client to ESCO requested by SEF
 - › obliges the bank, the provider and the client to take **a common procedure in the form of preparing the sale of receivables** before receiving the subsidy and **transferring funds to the provider** no later than 10 days after receiving the subsidy



ADJUSTMENT 2: REALLOCATION OF SUBSIDY POSSIBLE IF EEI MEASURES CHANGE

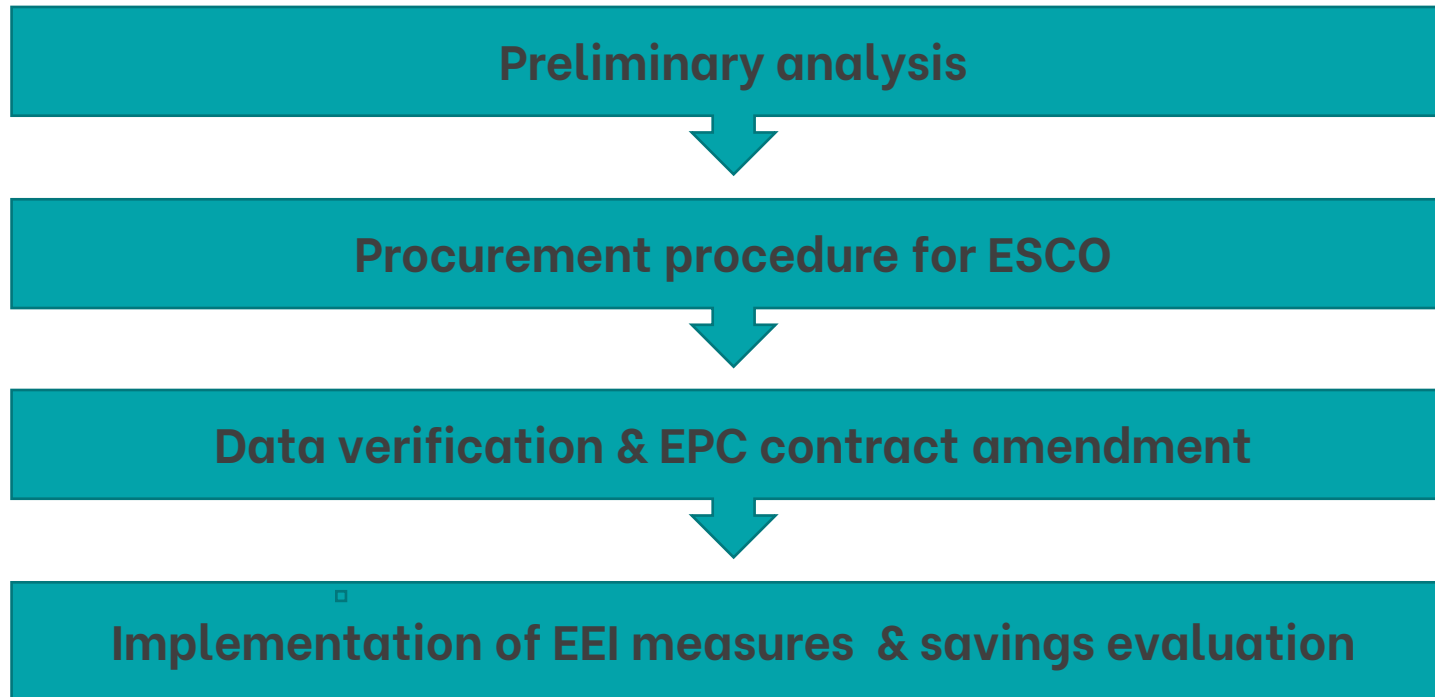
- › **The first subsidy application** to SEF is prepared as a very preliminary assessment
 - › SEF **allocates subsidy according to the preliminary proposal**, ie. before procurement procedure
- › **Set of EEI measures change** between submission of subsidy application and the finalization of set of EEI measures,
 - › the **subsidy may be reallocated among EEI measures** based on SEF rules for subsidy allocation
 - › **original subsidy threshold** should not be exceeded.
- › Final reallocation is a matter of **approval by SEF**

OPTIONAL FEATURE: SPLIT OF PAYMENTS TO ESCO

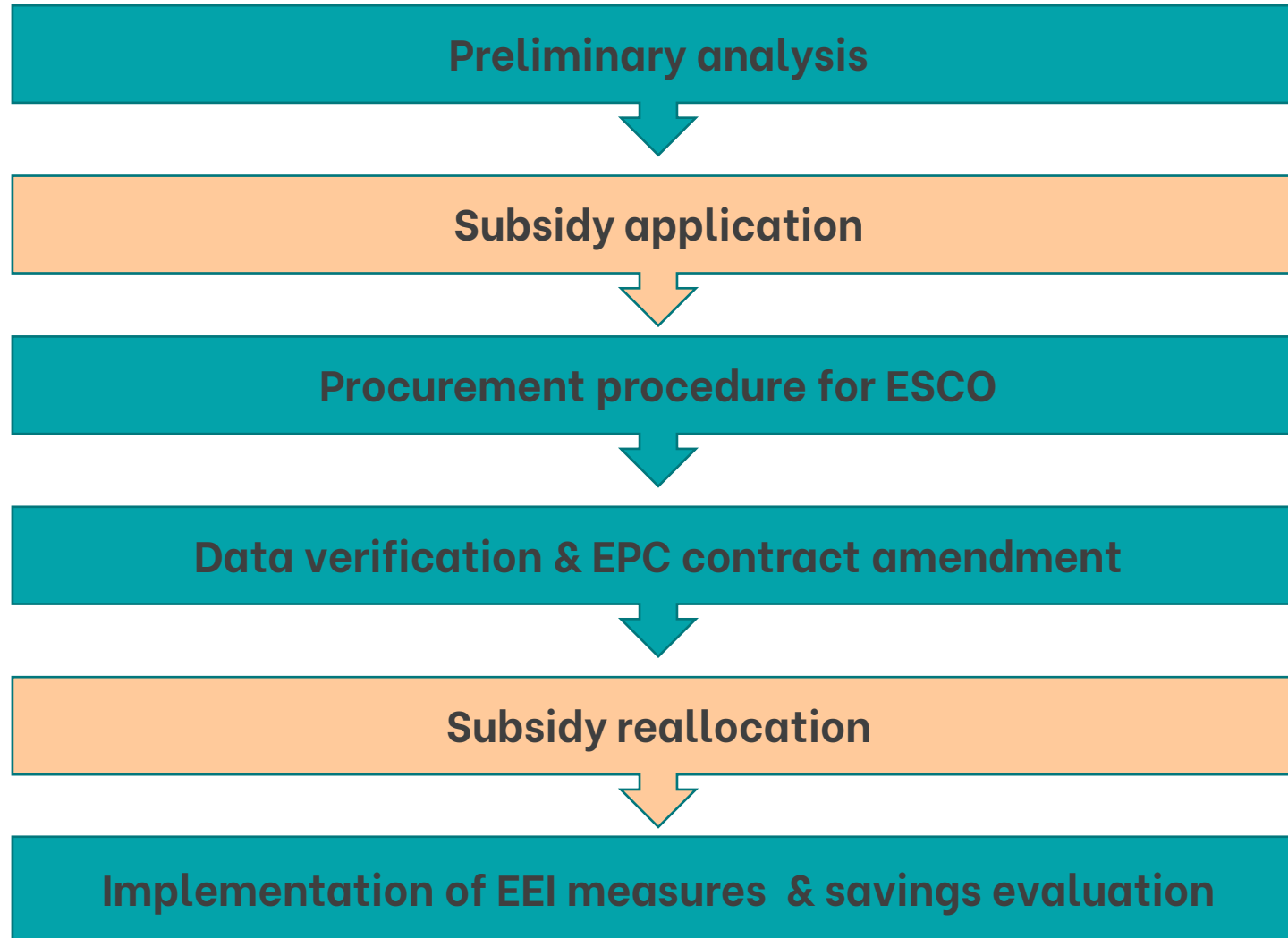
- › **A part of payments to ESCO is paid earlier**
 - › **optional feature** created after inflation increased in the CR and public clients were not able to accept inflation clause
 - › due to the **high interest rates and a sharp increase in prices** very beneficial to ESCO
 - › **payments to ESCO** were split into two parts:
 - › 1st part is paid **after roughly half of the** measures are installed
 - › 2nd part is paid **after hand over** of the complete installation to the client



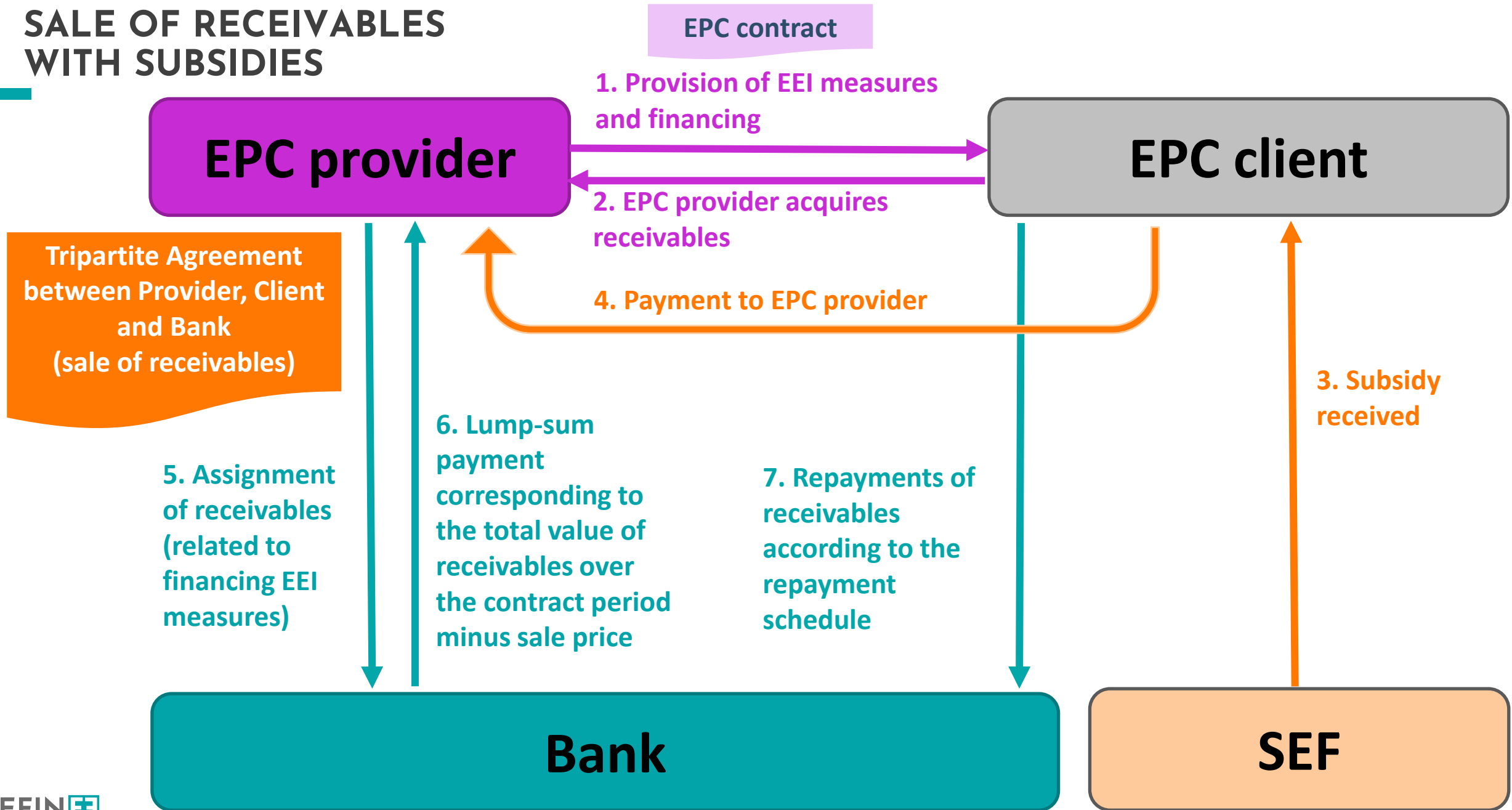
TYPICAL EPC PROCESS IN CZECHIA



EPC PROCESS WITH SUBSIDIES



SALE OF RECEIVABLES WITH SUBSIDIES



PROCUREMENT OF EPCs COMBINED WITH SUBSIDIES

> **Competitive procedure with negotiation**

> => competition among tenderers leads to the **best solution for the client** (as in standard process for EPC without subsidies) based on the following conditions:

1. **The subsidy value** is specified in tender dossier, so all tenderers have **equal conditions**
2. **Client own resources** must be also specified in tender dossier
3. **The rest of the investment and financial costs** are repaid back within specified contract length (8-12 years). The payment of installments must not be higher than the guaranteed cost savings
4. **Award criteria** must reflect amount of subsidy and client own resources (direct financial support increases the weight of price)
5. **Reallocation of subsidies** is in compliance with the public procurement legislation

DEEP RENOVATIONS IN PSYCHIATRIC HOSPITALS BOHNICE AND KOSMONOSY - PILOT PROJECTS

- › EPCs combined with subsidies from OPE
- › co-financed from client's own sources
- › Hospitals managed by the Ministry of Health
- › Buildings are **protected monuments**



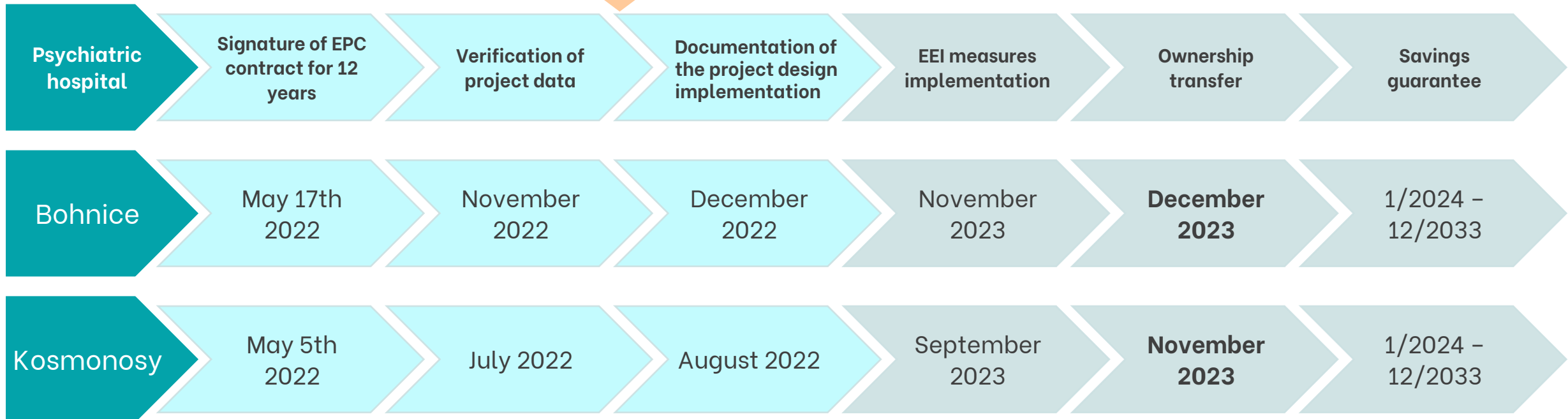
PILOT PROJECT	CONSTRUCTION MEASURES	TECHNOLOGY MEASURES
Hospital Bohnice Hospital Kosmonosy	<ul style="list-style-type: none"> • replacement or refurbishment of all windows • only thermal insulation of attics possible due to monument protection 	<ul style="list-style-type: none"> • renovation of heat distribution network • new lighting system, HVAC, IRC system • new energy management control system
Hospital Kosmonosy		<ul style="list-style-type: none"> • new boiler house including gas condensation boilers, cogeneration unit

IMPLEMENTATION OF PILOT PROJECTS

Hospital receives subsidy from the SEF

Tripartite agreement signed between client, provider and bank

Bank sends payment for receivables to the provider



PILOT PROJECTS: COSTS, SUBSIDIES, GUARANTEED SAVINGS

Mill. EUR	Investment incl. VAT	Financial costs	Energy management	Investment incl. VAT + financial costs	Total costs
Bohnice	22.6	0.9	0.3	23.5	23.8
Kosmonosy	4.6	0.3	0.1	4.9	5.0



Mill. EUR	Subsidies	Client's repayment from savings	Client own sources	Total financing of investments	Guaranteed savings
Bohnice	19.0	3.7	0.9	23.5	6.9
Kosmonosy	2.8	1.8	0.3	4.9	2.0

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Thank you
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