

SUCCESS CASE 38.2025

SCORING CAPEX

EVALUATION OF INVESTMENT
PROJECTS

THE CHALLENGE

ČEZ Distribuce, the largest electricity distribution system operator in the Czech Republic, invests nearly 20 billion CZK (approx. €800 million) annually. *Scoring CAPEX* is a method for **evaluating benefits for both an individual investment project and the investment portfolio**. Initially, *Scoring CAPEX* was developed as an Excel-based tool, but as the complexity of investment planning grew, a more robust solution was needed. In collaboration with the Asset Management and IT Development departments, the tool was transformed into a standalone application, enhancing scalability, automation, and integration with company systems.

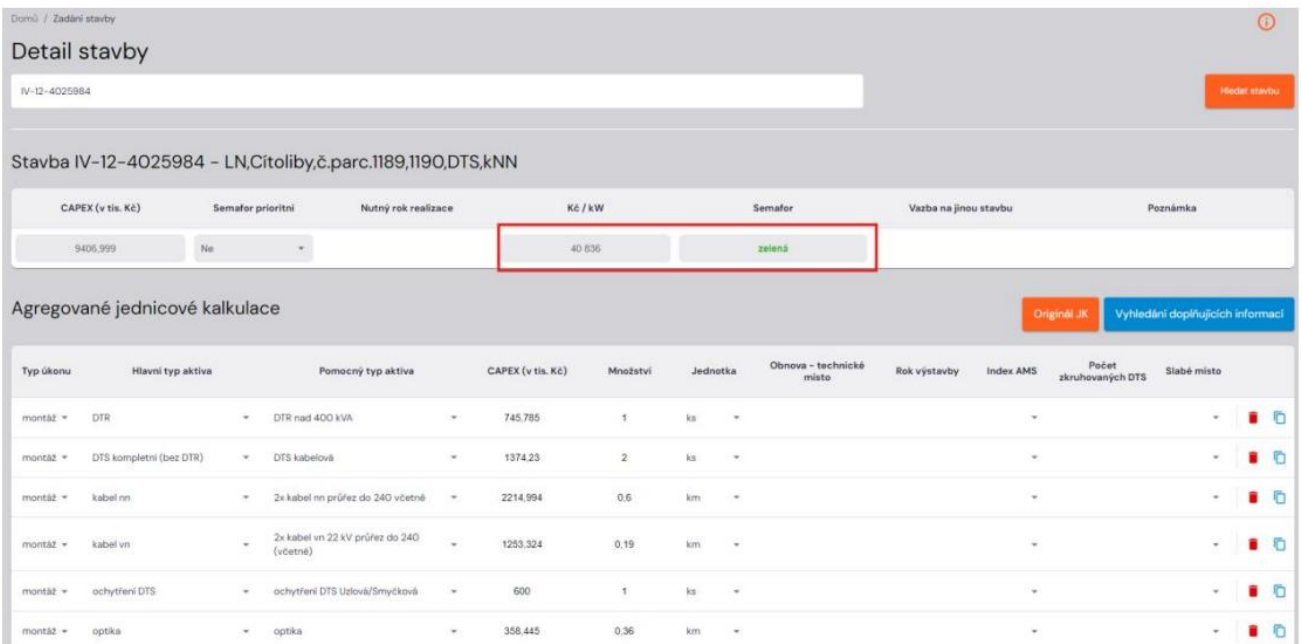
THE SOLUTION

With *Scoring CAPEX*, each project is assigned a score based on its effects (e.g., impact on operational expenditure (OPEX), system average interruption duration index (SAIDI), losses, smart grids, etc.). The score takes into account the capital expenditure (CAPEX) budget, depreciation, and regulated asset base model (RAB) x weighted average cost of capital (WACC) indicators and is recalculated as the CAPEX level changes throughout the year. **The entire portfolio is then optimised to ensure budget compliance and achievability of the selected targets** (e.g. SAIDI improvement, optical infrastructure development, grid smartification, etc.), **and maximise OPEX reduction**. The outcome is a **prioritised plan of investment projects**, structured into implementation years.

In addition to assessing internal investment projects for renewal or expansion, **customer-driven projects**, which are mandatory, also require scoring. These projects are assigned both a score and a CZK/kW parameter, which indicates the capital cost per connected kilowatt (generation or consumption). The CZK/kW metric ensures that technical solutions are optimally designed, avoiding unnecessary oversizing.

MAIN ACHIEVEMENTS

A key aspect of the solution was transitioning from an Excel-based model to a **fully standalone application**, enabling **seamless integration with company systems** such as Systems, Applications, and Products (SAP) and Geographic Information System (GIS). Project scoring results are now transferred to SAP via an interface, ensuring an efficient data flow. The new system enhances calculation precision by leveraging detailed asset condition data, failure rates, and operational costs. This optimised approach has generated annual cost savings in the order of tens of millions of Czech korunas through **more efficient fund allocation and reduced OPEX**. Furthermore, investment planning has become more transparent, **simplifying financial tracking and justification**.



Detail stavby

IV-12-4025984

Stavba IV-12-4025984 - LN,Citolibý,č.parc.1189,1190,DTS,kNN

CAPEX (v tis. Kč)	Semafor prioritní	Nutný rok realizace	Kč / kW	Semafor	Vazba na jinou stavbu	Poznámka
9405,999	Ne		40 636	zelená		

Agregované jednicové kalkulace

Typ úkonu	Hlavní typ aktiva	Pomocný typ aktiva	CAPEX (v tis. Kč)	Množství	Jednotka	Obnova - technické místo	Rok výstavby	Index AMS	Počet zkrhuovaných DTS	Slabé místo
montáž	DTR	DTR nad 400 kVA	745,785	1	ks					
montáž	DTS kompletní (bez DTR)	DTS kabelová	1374,23	2	ks					
montáž	kabel nn	2x kabel nn průřez do 240 včetně	2214,994	0,6	km					
montáž	kabel vn	2x kabel vn 22 kV průřez do 240 (včetně)	1253,324	0,19	km					
montáž	ochyťření DTS	ochyťření DTS úplová/šmyčková	600	1	ks					
montáž	optika	optika	356,445	0,36	km					

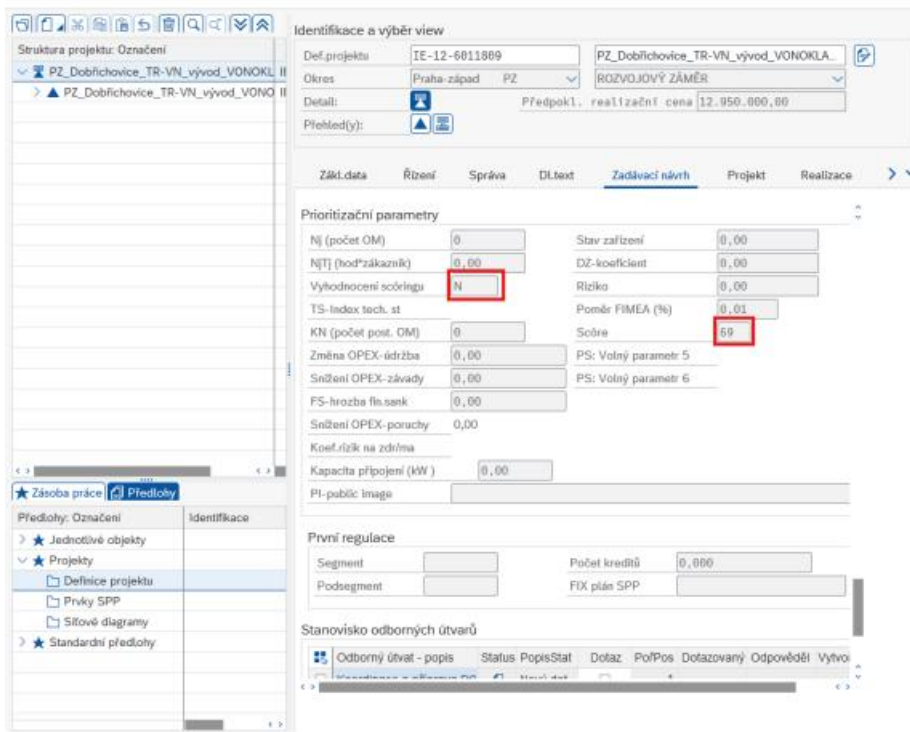
Scoring CAPEX Application screenshot.

KEY SUCCESS FACTORS

Aligning with long-term business and regulatory goals ensured that the methodology was not only technically accepted, but also strategically integrated with broader company objectives. A crucial success factor was the close collaboration between Business Asset Management and IT Development, which was instrumental in developing a fully functional and automated application.

WAY FORWARD

The next steps for Scoring CAPEX is to focus on further improving the methodology and expanding its application. A key priority is **enhancing the scoring algorithms to fine-tune investment evaluations**. Additionally, the methodology will be extended to **assess non-technical assets** such as IT systems, company vehicles, and buildings, ensuring a more **comprehensive approach to investment planning**.



The screenshot shows the SAP project score interface. The left sidebar contains a tree view with the following structure:

- Struktura projektu: Označení
 - PZ_Dobřichovice_TR-VN_vývod_VONOKLA II
 - PZ_Dobřichovice_TR-VN_vývod_VONOKLA II
- Předlohy: Označení
 - Jednotlivé objekty
 - Projekty
 - Definice projektu
 - Prvky SPP
 - Síťové diagramy
 - Standardní předlohy

The main area displays the 'Identifikace a výběr view' section with the following details:

- Def. projektu: IE-12-6011809
- Okres: Praha-západ PZ
- Detail: PZ_Dobřichovice_TR-VN_vývod_VONOKLA II
- Přehled(y): Předpokl. realizační cena 12.950.000,00

The 'Zadávací návrh' tab is active, showing the 'Priorizační parametry' section with the following values:

Parametr	Hodnota
Nj (počet OM)	0
NjTj (hod*základník)	0,00
Vyhodnocení scóringu	N
TS-index tech. st	0
KN (počet post. OM)	0
Změna OPEX-údržba	0,00
Snižování OPEX-závady	0,00
FS-hrozba fls.senk	0,00
Snižování OPEX-poruchy	0,00
Koef.rizik na zdrma	0,00
Kapacita připojení (kW)	0,00
PI-public image	

The 'První regulace' section shows the following values:

Parametr	Hodnota
Segment	
Podsegment	
Počet kreditů	0,000
FIX plán SPP	

The 'Stanovisko odborných útvarů' section shows the following values:

Parametr	Hodnota
Odborný útvar - popis	
Status PopisStat	
Dotaz	
PořPoř	
Dotazovaný	
Odpověď	
Vytvo	

Project score in SAP screenshot.