



Transmission

December-2023



Agenda

1. General Concepts

- 1.1 Transmission Overview
- 1.2 Revenue categories
- 1.3 The transmission business
- 1.4 Annual Tariff Adjustments (ATA)
and Periodic Tariff Revision (PTR)

2. Regulatory x IFRS

3. Sector challenges

1. General Concepts

What you need to know...



- ✓ How the Transmission segment works?
- ✓ What are the main revenue components?
- ✓ How the revenue is adjusted?

1.1 Transmission Overview

Overview: Transmission in the Power Sector

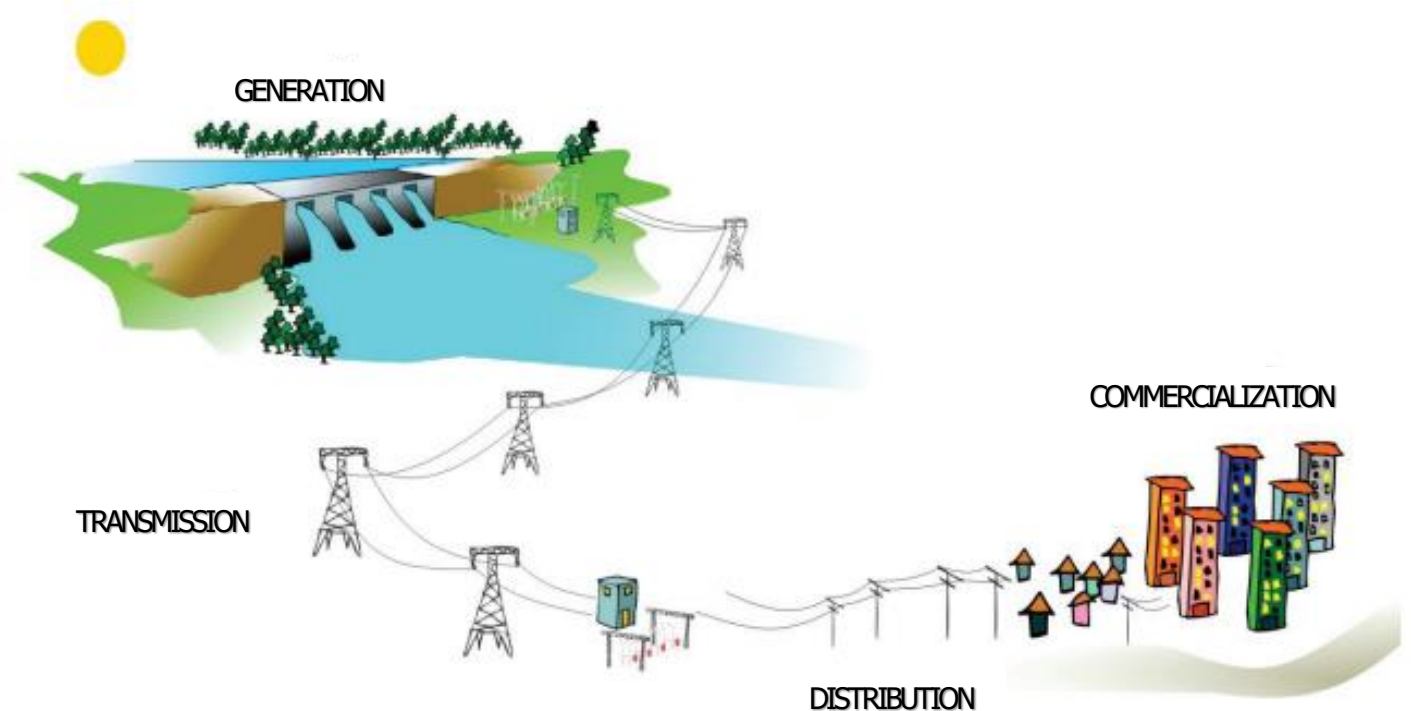


Transmission System

It is the process of **transporting energy from the generating plant, at high voltage, to distribution companies or large consumers**. Transport is carried out by lines above 230 kV (National Grid), or below 230kV (DITs), generally using alternating current.

At the end of the process, there is a substation for voltage reduction, allowing connection to the distribution grid or directly to large consumers.

The Allowed Annual Revenue (RAP) refers to the remuneration for the **availability** of assets.



Source: ANEEL

National Transmission System

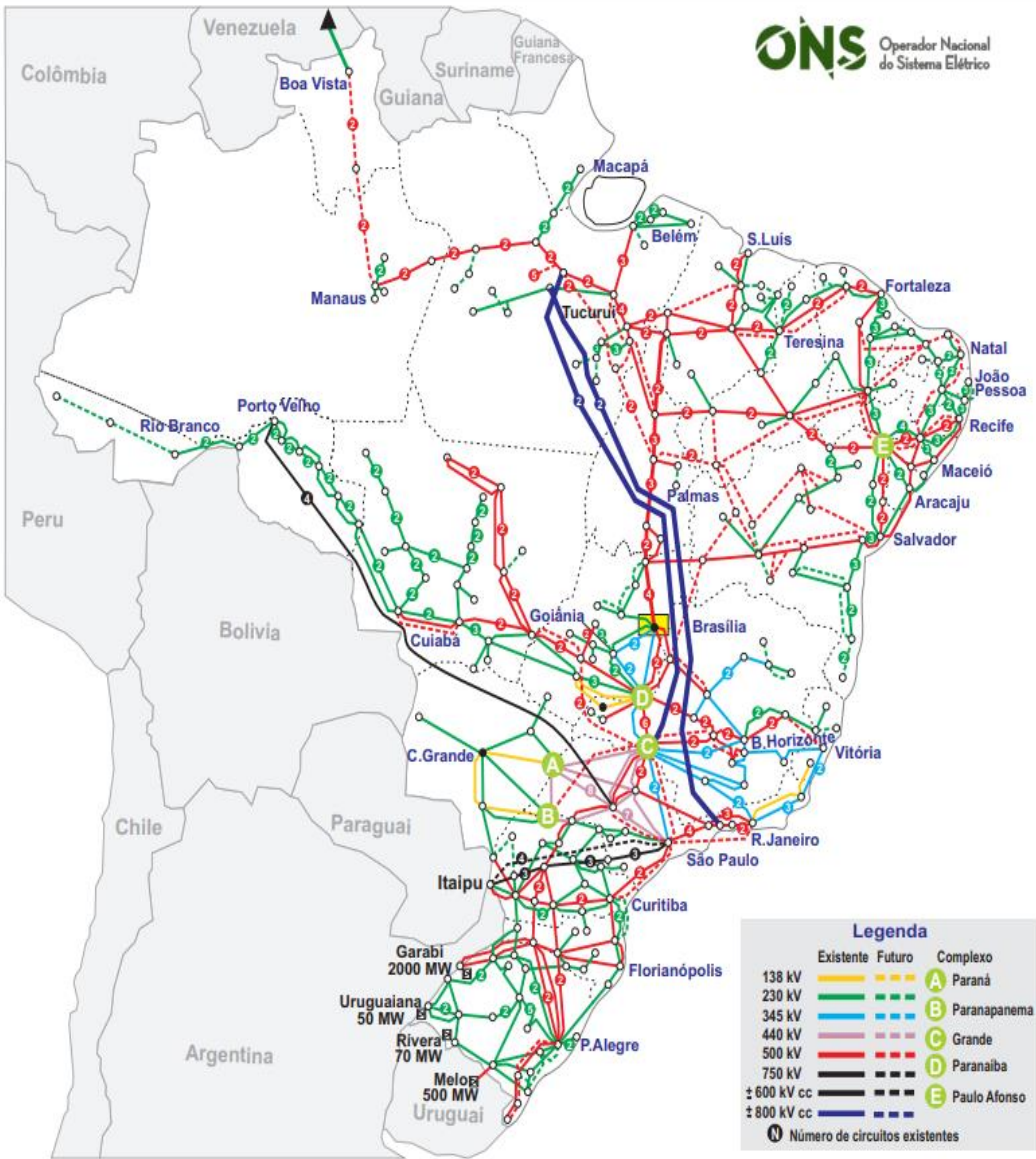


SIN (Interconnected National System) in numbers

TRANSMISSION NATIONAL GRID EXTENSIL

	2022	2027	Δ
230 kV	67,137 km	75,115 km	14%
345 kV	10,491 km	11,406 km	6%
440 kV	6,934 km	7,027 km	2%
500/525 kV	70,044 km	97,039 km	32%
600 kV until	24,703 km	26,170 km	-
800 kV			
TOTAL	179,311 km	216,759 km	18%

SIN transmits 99% of total energy volume in the country.

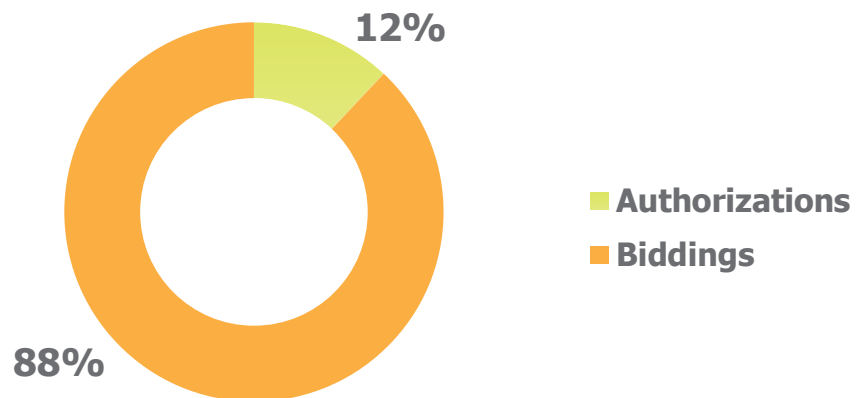


National Transmission System - Perspectives

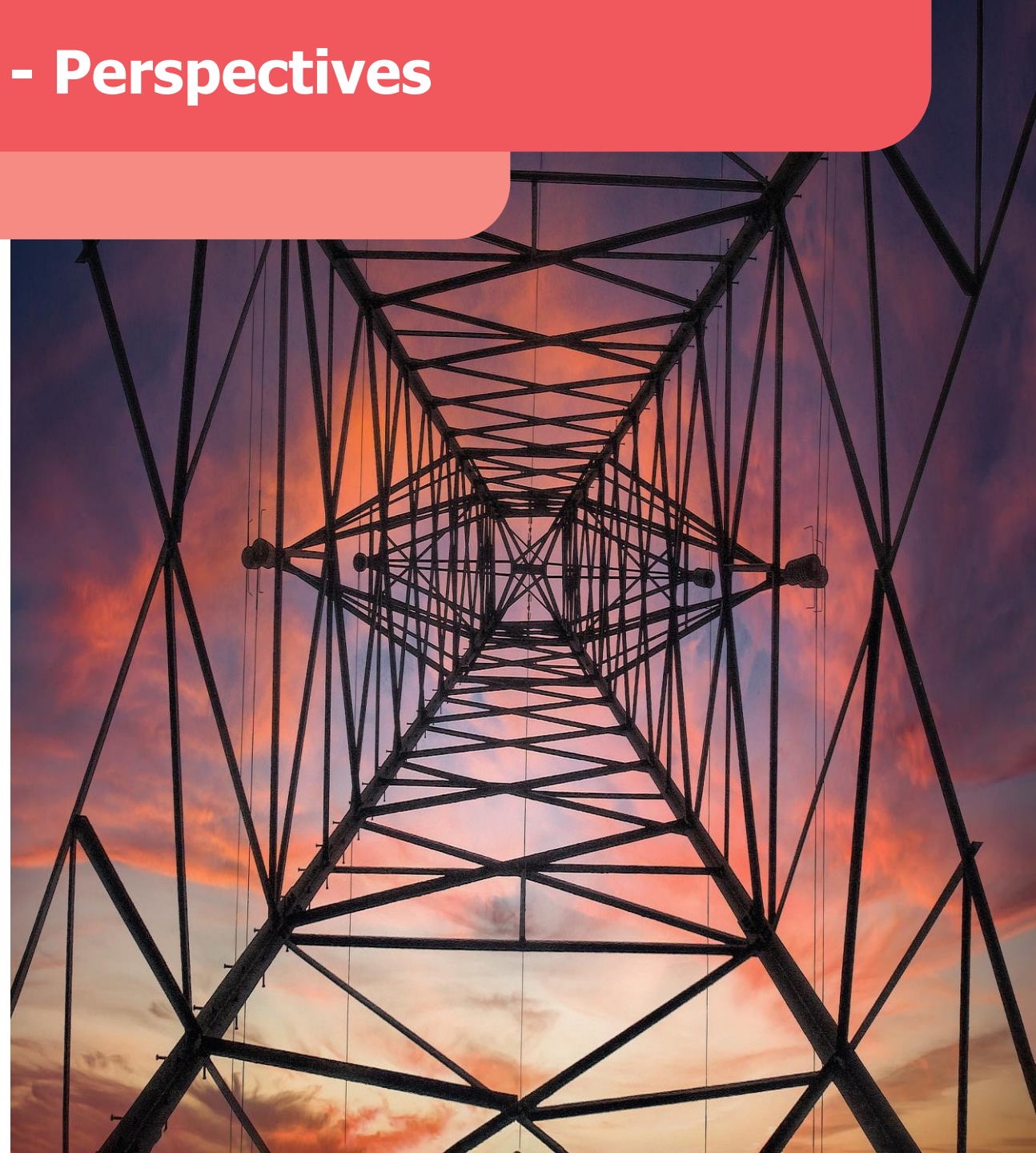
Expansion and Opportunities

- Energy Transition (key role)
- Assets Renewal / Grid Improvements
- Re-bidding of Expired Concessions
- R\$ 99.4 billion in estimated investments for the next years (PET/PELT 2022 – EPE)

Investments in the System



Source: https://www.epe.gov.br/sites-pt/publicacoes-dados-abertos/publicacoes/PublicacoesArquivos/publicacao-714/01.Relat%C3%B3rio%20PET-PELP%20o%20Sem2022%20-%20EPE-DEE-RE-105_2022.pdf.



Stable and positive regulatory structure

1

Stable regulation: The industry is regulated by the government and has a stable track record

2

Predictable revenues: 30-year contracts with RAP adjusted for inflation

3

No volume risk: Payment based on grid availability, regardless of the volume of energy transported

4

Low credit risk: RAP is paid directly by generators, distributors and free consumers with a solid guarantee mechanism

5

High investment in CAPEX in the coming years: Power transmission needs to continue growing to support the expansion of systems and maintain their reliability



RAP – Allowed Annual Revenue



TransCos are remunerated through the so-called **RAP - Allowed Annual Revenue**, as a form of payment¹ for the service provided



The RAP is **readjusted for inflation** annually, in the month of **July** of each year, and **revised**, during the concession period, at **periodic intervals of 5 years**



The RAP is made up of:

- Remunerated Investment (CAPEX); and
- Regulatory O&M (Operation and Maintenance) costs

During RTPs, the following occurs:

- The reassessment of RAB,
- The redefinition of O&M costs,
- The revision of the WACC for **renewed transcos** and
- The review of Cost of Debt (Kd) for the **tendered transcos**

In both cases, repositioning the RAP of the new tariff cycles

⁽¹⁾ The payment for the service provided is done by the final consumer with tariffs based on the service for the price [Author's Note: and not for the cost]. [Ref.: Art. 14 of LAW No. 9,427/1996].

Concepts related to Transcos Revenue

RBSE/RPC *versus* RBNI/RCDM



Existing System

Portion of the RAP due to concessionaires whose contracts were renewed in advance in 2012, related to the assets of the NATIONAL GRID and DIT² of the existing system, not depreciated until May-2000.



New Investments

Portion of the RAP corresponding to the new transmission facilities that are part of the NATIONAL GRID and DIT (from 2000 onwards), authorized by ANEEL (Reinforcements).

⁽¹⁾ RBSE/RBNI: Portion of RAP of Transmission facilities in the National Grid ($\geq 230\text{kV}$);
RPC/RCDM: Portion of RAP of Other Transmission Facilities ($< 230\text{kV}$).

⁽²⁾ DIT - Other Transmission Facilities ($< 230\text{kV}$).

Concepts related to Transcos Revenue

RMEL and O&M



RMEL

Portion of the RAP related to **improvements (national grid and DIT)** carried out in the Transmission facilities.



O&M

Portion of the RAP associated with the cost of operation and maintenance expenses for the transmission facilities, reassessed in Revision processes.

Concepts related to Transcos Revenue

Variable Parcel *versus* Adjustment Parcel



Variable Parcel / DIT Quality

Financial reduction factor of the revenue received by the Transco, due to eventual unavailability of the assets (due to the decrease in the quality of the service provided by FT – Transmission Function).



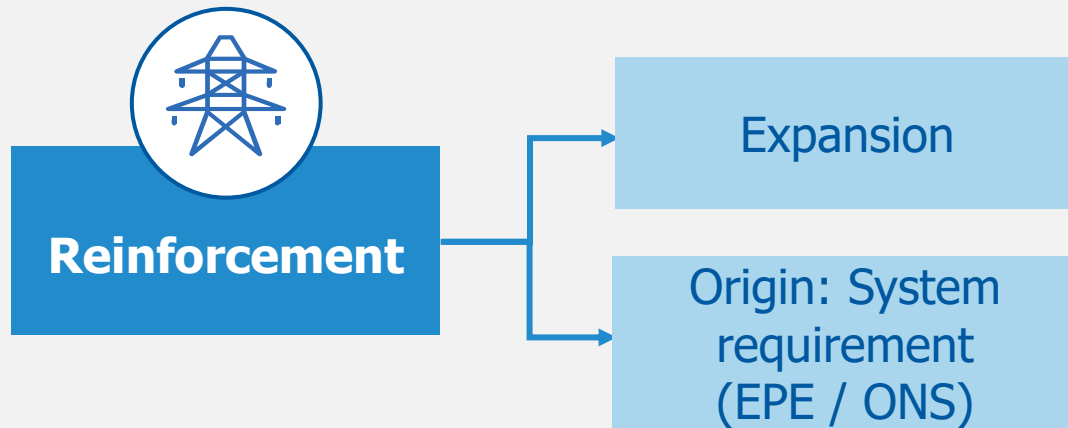
Adjustment Parcel

It is the (financial) mechanism used by ANEEL, provided for in the contract, to offset the deficit or surplus in revenue that occurred in the previous tariff cycle (cycle i-1).

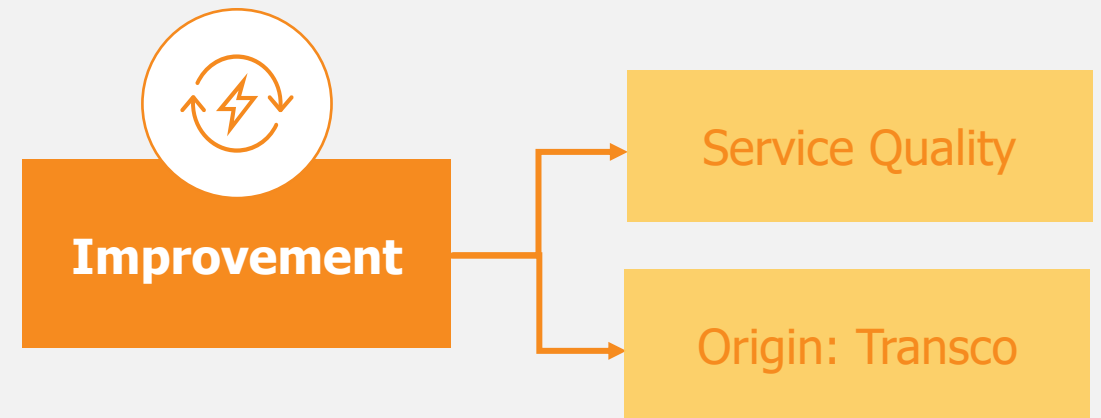
Reinforcements and Improvements

Power Transmission Service Rules

Reinforcement is the installation, replacement or refurbishment of assets in existing Transmission Facilities, or the adaptation of these facilities, **to increase transmission capacity**, SIN reliability or to connect Accessors



Improvement is the investment, related to the replacement or renovation of assets in existing Transmission Facilities in the fixed assets in service of the transmission company, in order to **maintain the provision of adequate electricity transmission services**



Reinforcements and Improvements

Power Transmission Service Rules

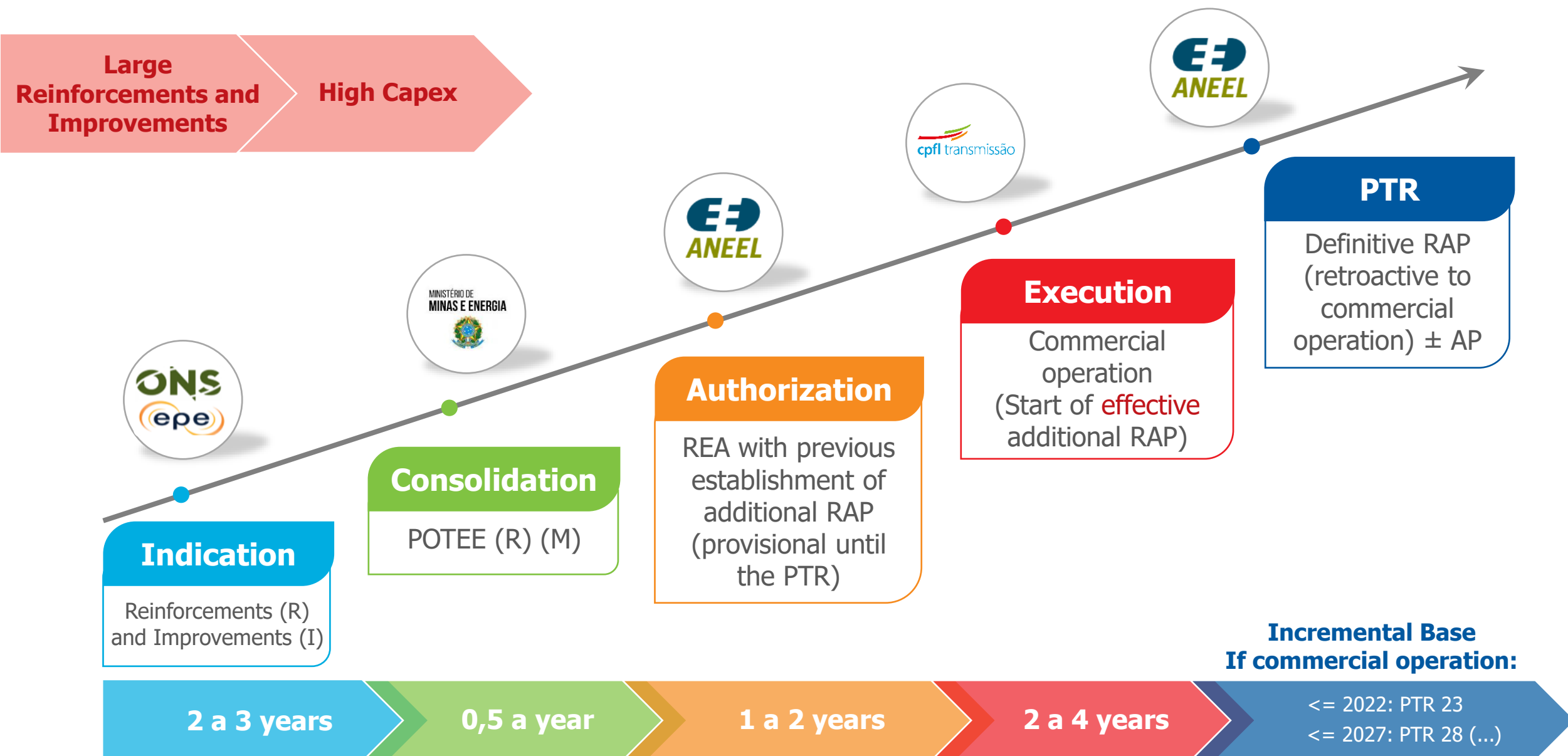
Valuation of Reinforcements and Improvements

- The additional portion of RAP associated to CAPEX required to implement **Reinforcements** and **Improvements** is calculated based on regulatory parameters and **standard costs** or **recorded costs**, both always subject to subsequent inspection by ANEEL.
- The **standard costs** are established in the ANEEL Reference Price Database, approved by Ratifying Resolution n. 758, of 2009, and prices various **equipment, materials and services** that have **corresponding, similar and analogous items**.
- The **recorded costs** correspond to the effectively recorded values of equipment, materials and services (CA), in accordance with the Electrical Sector Asset Control Manual.



The BPR is based on the average costs practiced by all Transcos, and also reflects the average efficiency, in the construction of the power transmission sector.

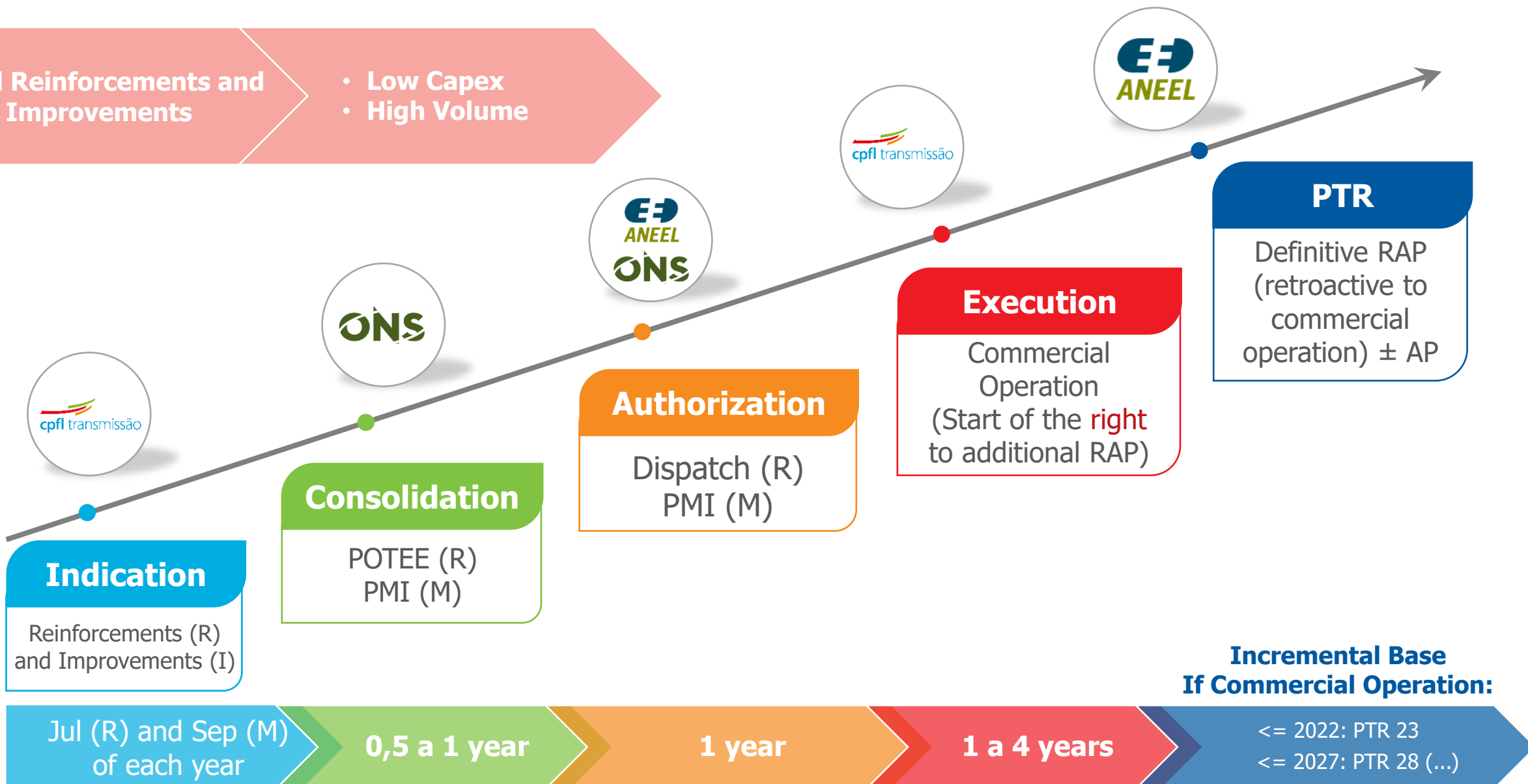
Large Reinforcements and Improvements (with previous RAP calculation)



Small Reinforcements and Improvements (without previous RAP calculation)

Small Reinforcements and Improvements

- Low Capex
- High Volume



Applicable Regulation

Tariff Regulation Procedures (PRORET) Module 9 – Transmission Concessionaire's

Submodule	Renewed	Tendered
9.1 Periodic Revision of Transmission Concessionaires Revenues	X	
9.2 Periodic Revision of the Tendered Concessionaires Revenues		X
9.3 Annual Adjustment of Transmission Concessionaires Revenues	X	X
9.7 Implementation of Improvements and Reinforcements in Facilities under the responsibility of Transmission Concessionaires	X	X
9.8 Methodology for Calculating the Price Cap of Allowed Annual Revenue from Electricity Transmission Concession Auctions		X

1.2 Revenue Categories

Contract Categories

Category 1



Concessions prior to 2000 and Renewed in 2013

- RAP adjusted annually by the IPCA
- 30-year Contract, renewed in 2013 (PM 579/2012)
- Tariff Revision every 5 years (O&M, WACC and RAB)

Category 2



Concessions between 2000 and December 2006

- RAP adjusted annually by the IGP-M
- 30-year Contract
- RAP reduction by 50% in the 16th year of operation
- There is no tariff revision
- Revision of reinforcements and improvements as of July 2019 every 5 years

Category 3



Concessions after January 2007

- RAP adjusted annually by the IPCA
- 30-year Contract, with 3 tariff revisions (Kd and WACC)
- Revision of reinforcements and improvements every 5 years

Concepts and Characteristics of Transmission Contracts

Characteristics of the Tendered vs Untendered contract	Untendered Contracts (RBSE/RBNI)	Tendered Contracts
Revenue Definition	Revenue fixed according to criteria established by ANEEL for compensation on indemnity assets and incremental investments in the concession.	Revenue determined at the time of the concession auction in order to remunerate the projected investment/maintenance.
Investments throughout the concession	Possible investments throughout the concession, which will reflect in RAP increments.	The contract does not provide for the possibility of investment beyond the works foreseen at the time of the auction, except for future large reinforcements and improvements authorized in the future.
Concession Period	Contract renewed in 2012 (for another 30 years)	Contract with specific maturity, without contractual clause of renewal.
Indemnification / Balance of non-depreciated assets	The portion of non-depreciated investments (non-amortized or non-indemnified) linked to reversible assets composes the concessionaire's revenue and is also revised periodically.	For the concession of the tendered transmission companies, the matter has not yet been pacified for the improvements, so that there is no certainty of indemnification at the end of the concession.
Tariff Revision	All investments have parameters subject to tariff revision.	Only "Kd" is subject to RTP; Only investments in Reinforcements (and Improvements?) have parameters subject to tariff revision, along the lines of existing concessions.

Extension of the Concessions of the Untendered Companies

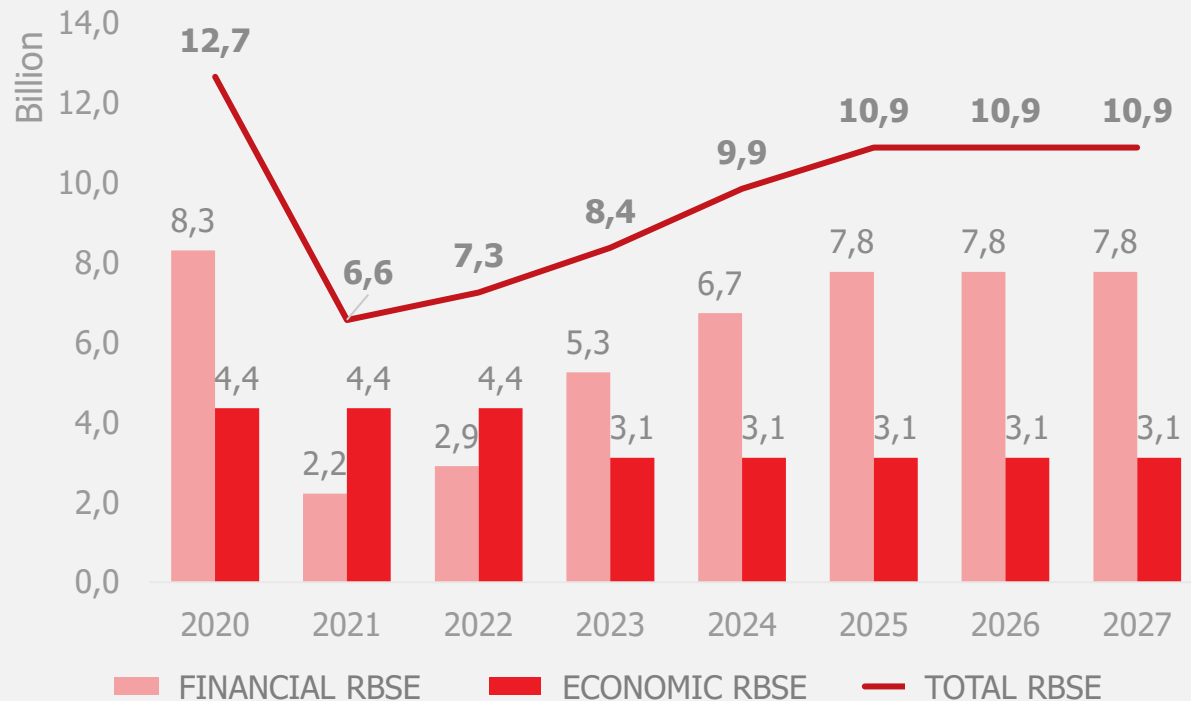
- PM 579/12, converted into Law 12.783/13, changed the form of remuneration for transmission companies not tendered, with the objective of reducing the tariff, including: Sufficient Revenue to cover O&M costs and Payment for unamortized assets
- The Decision to adhere to the extension by 100% of the transmission companies was based on the fair payment, net of taxes, for the unamortized assets.

§ 2º The granting power is authorized to pay, in the form of a regulation, for the concessionaires that opt for the extension provided for in this Provisional Measure, in the concessions provided for in this Electrical Measure reached by § 5 of article 17 of Law No. 9.074 of 1995, the relative value to assets considered non-depreciated existing on May 31, 2000, registered by the concessionaire and recognized by ANEEL.



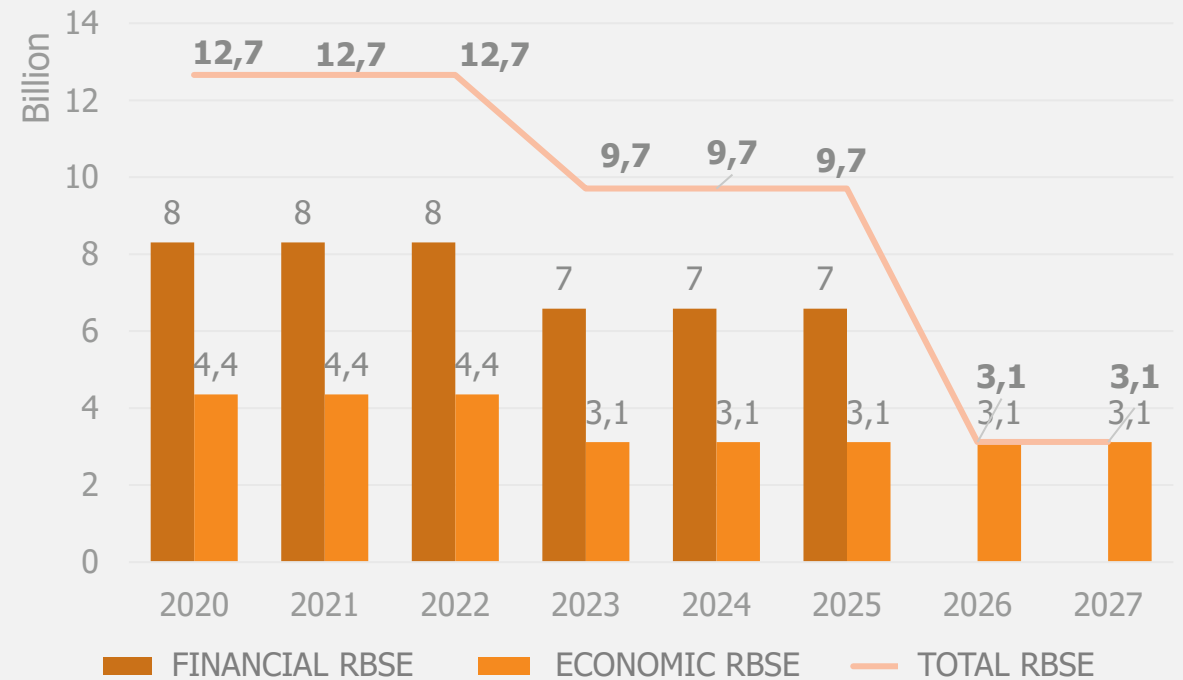
RBSE Reprofitting - Impacts on the Sector

Actual Flow – RBSE¹



¹ Base June 2020

Old Flow – RBSE²



² Base June 2020

- RAP Reduction in 2021/2022 and 2022/2023 cycles
- From 2023/2024 to 2027/2028 cycles, a constant amortization profile was applied

These scenarios do not consider ongoing discussions with ANEEL.

Key takeaways

01

Transmission has great regulatory stability and is currently the segment with the most investment prospects.



The RAP approved by Aneel is the way to remunerate the investments made in the asset. It is composed of several components, which differ in relevance and over time, according to the characteristics of each asset.

02

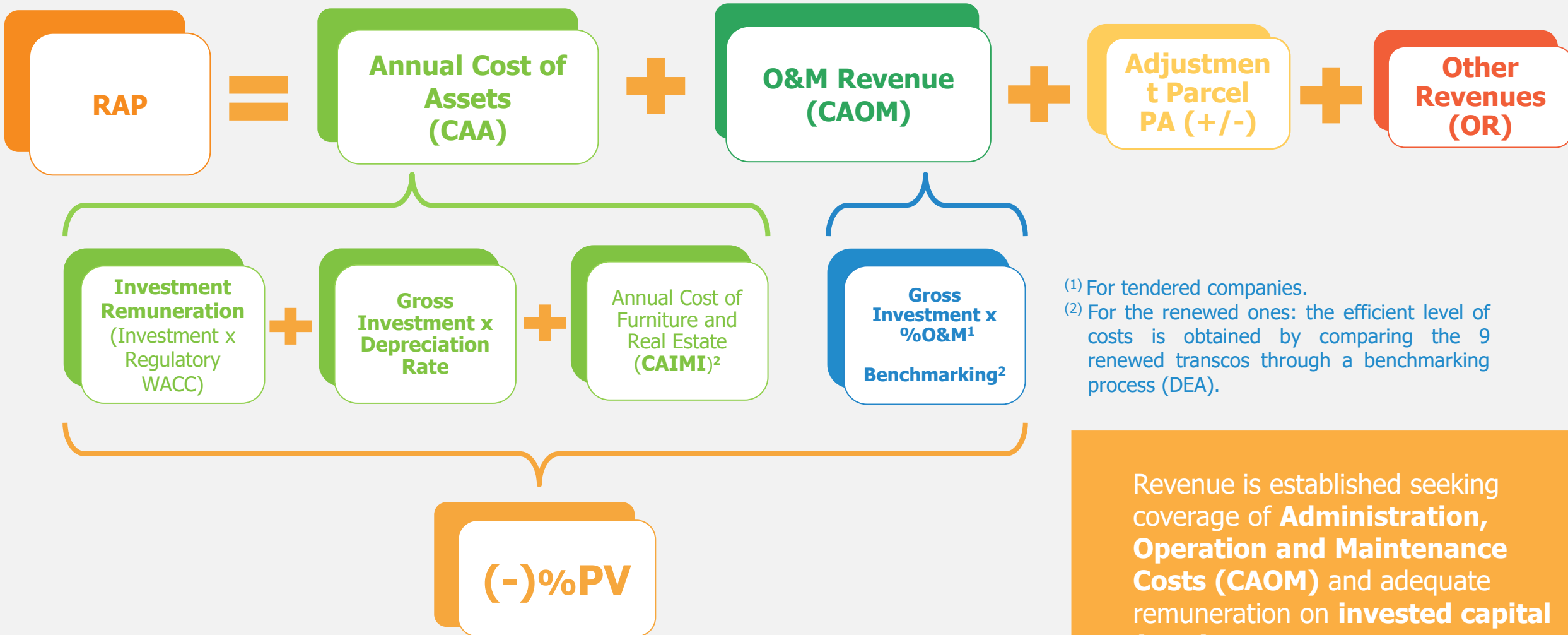
03

There are important differences in business dynamics, depending on the contract category held by a given transmission company. Understand these differences is crucial to perform the correct modeling.



1.3 The Transmission Business

Transmission Revenue Composition

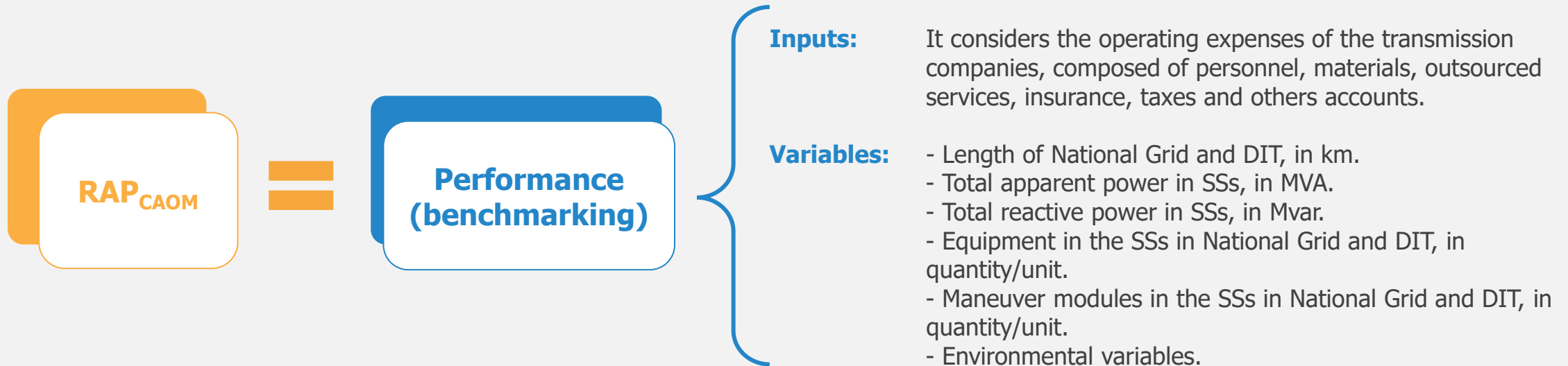


(1) For tendered companies.

(2) For the renewed ones: the efficient level of costs is obtained by comparing the 9 renewed transcos through a benchmarking process (DEA).

Revenue is established seeking coverage of **Administration, Operation and Maintenance Costs (CAOM)** and adequate remuneration on **invested capital (CAA)**.

OPEX (CAOM) – Renewed companies



ANEEL approach in PTRs:

- Defines the efficient level of costs for executing the processes, in accordance with the conditions set out in the concession contracts and regulations.
- The identification of the efficient level of costs is obtained by the comparison between the transmission companies through a benchmarking process, taking into account the attributes (**Inputs** and **Variables**) of each of the 09 (nine) renewed transmission companies.
- For the next PTR of 2023, for the period between July 1st, 2023 and June 30, 2028, a trajectory will be adopted between the regulatory operating costs currently included in the RAPs linked to the concession contracts subject to review on July 1st of 2023 and regulatory operating costs considered efficient, as in the case of PTR in 2018, illustrated in the next slide.

OPEX (CAOM) – Renewed Companies

Last RTP results (prices of Jun-2018):

EMPRESA	O&M Regulatório Eficiente
CTEEP CC 059/2001	619.620,87
CEMIG-GT CC 006/1997	207.039,34
CEEE-GT CC 055/2001	311.396,60
CELG G&T CC 063/2001	53.325,15
COPEL-GT CC 060/2001	125.035,68
CHESF CC 061/2001	777.597,76
FURNAS CC 062/2001	939.762,72
ELETROSUL CC 057/2001	269.409,58
ELETRONORTE CC 058/2001	460.469,44

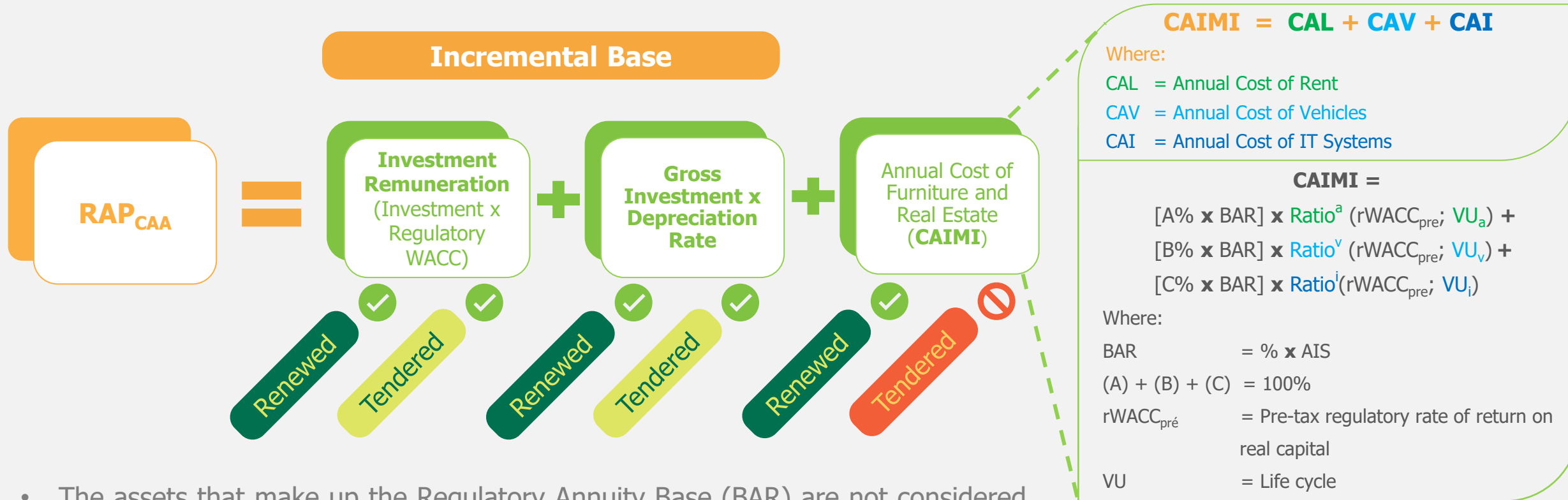
Regulatory Operating Costs to be recognized for each contract between July 1st, 2018 and June 30, 2023 (R\$ X 1000):

Empresa	<u>Jul/2018 a</u> <u>Jun/2019</u>	<u>Jul/2019 a</u> <u>Jun/2020</u>	<u>Jul/2020 a</u> <u>Jun/2021</u>	<u>Jul/2021 a</u> <u>Jun/2022</u>	<u>Jul/2022 a</u> <u>Jun/2023</u>
CTEEP – CC 059/2001	723.551,30	697.568,69	671.586,09	645.603,48	619.620,87
CEMIG-GT – CC 006/1997	219.512,17	216.393,96	213.275,75	210.157,55	207.039,34
CEEE-GT – CC 055/2001	272.370,59	282.127,09	291.883,59	301.640,10	311.396,60
CELG G&T – CC 063/2001	31.869,46	37.233,39	42.597,31	47.961,23	53.325,15
COPEL-GT – CC 060/2001	163.051,03	153.547,19	144.043,35	134.539,52	125.035,68
CHESF – CC 061/2001	746.621,78	754.365,77	762.109,77	769.853,76	777.597,76
FURNAS – CC 062/2001	901.253,48	910.880,79	920.508,10	930.135,41	939.762,72
ELETROSUL – CC 057/2001	508.994,25	449.098,08	389.201,91	329.305,75	269.409,58
ELETRONORTE – CC 058/2001	412.533,57	424.517,54	436.501,51	448.485,48	460.469,44
Total	3.979.757,63	3.925.732,51	3.871.707,39	3.817.682,26	3.763.657,14

*Information extracted from the Ratifying Resolution of the PTR 2018 Process; **Regulatory Operating Costs for the period from 07/01/2023 to 06/30/2028 are under discussion in ANEEL Public Consultation No. 031/2023.

CAPEX (CAA) – Renewed x Tendered Companies

CAA - return on capital of Electric Assets is made up of depreciation and return on capital (profitability), plus part of furniture and real estate installations (CAIMI).



- The assets that make up the Regulatory Annuity Base (BAR) are not considered in the Fixed Assets in Service (AIS) that will make up the RAB.
- The BAR is equivalent to a percentage calculated by ANEEL applied to Fixed Assets in Service (AIS) for regulatory coverage of the following groups of assets: (i) rents; (ii) vehicles and (iii) IT systems (hardware and software).

1.4 Annual Tariff Adjustments (ATA) and Periodic Tariff Revision (PTR)

Annual Tariff Adjustments (ATA)

General Aspects

- Calculated annually, it considers the Inflation Variation Index, defined in the concession contract.
- The RAPs are disclosed through ANEEL Resolutions and are valid from July 1st to June 30th of the following year.
- Authorizing Resolutions (REAs) **with prior establishment** of the additional RAP are included as "Forecast" or "Activated" if completed in the previous cycle.

Procedures

- There is a right to receive the RAP from the date of entry into operation.
- Facilities in operation authorized **without previous establishment** of the additional RAP, are established and "activated" in the adjustment, with retroactive value (via AP).
- The differences that make up the adjustment portion are calculated and updated until June of the current year.

Annual Tariff Adjustments (ATA)

- **In the periods between RTPs, the additional RAPs associated with Reinforcements and Improvements are provisional** (they are redefined in the revision process subsequent to the commercial start-up cycle, with retroactive effects)
- Any difference arising from the revision of the value will be considered in the transco's RAP in equal installments until the subsequent RAP periodic revision
- **The additional RAP is adjusted up to the price reference date of the tariff cycle**
- **The percentage of operation and maintenance costs – O&M, used in the calculation of the provisional CAOM, is 2.0%.**
- Depreciation rates are set out in the Electric Sector Asset Control Manual (MCPSE)



Calculation of the Additional RAP Portion (between cycles)

Annual Cost of Assets (CAA)

$$CAA = \left(\sum_{i=1}^n \frac{RC_i + QRR_i}{(1 + rWACC_{pré})^n} \right) * \left(\frac{rWACC_{pré}}{1 - (1 + rWACC_{pré})^{-m}} \right)$$

(1) (2)

$$RC_i = (RABn_{i-1}) * rWACC_{pré} \quad (i)$$

$$QRR_i = RABg_{i-1} * \delta \quad (ii)$$

Where:

- **RC_i**: Gross return on capital in year i;
- **QRR_i**: Regulatory remuneration quota in year i;
- **rWACC_{pré}**: Regulatory real rate of return on capital (before taxes);
- **RAB_n_{i-1}**: Gross regulatory asset base i-1;
- **RAB_g_{i-1}**: Get regulatory asset base i-1;
- **n**: Period of each flow;
- **m**: Number of years of the next tariff period;
- **δ**: Average rate of depreciation of facilities.

Comments

- 1) NPV of the sum of Gross Capital Remuneration (RC_i) with Regulatory Remuneration Quota (QRR_i);
 - i. The return on capital is calculated on the net RAB (with depreciation);
 - ii. The regulatory remuneration quota is calculated on gross RAB (fixed basis without depreciation);
- 2) The approved additional RAP **must be constant** until the end of the tariff cycle;
 - An investment made at the end of the 1st year of the tariff cycle will have 4 years of additional RAP, while an investment made at the end of the 3rd year will only have 2 years;
 - This part of the calculation harmonizes the additional RAP in equal parts without any financial loss for the transmission company;

Calculation of the Additional RAP Portion (between cycles)

Calculation of Inclusion of Charges

$$ROB = \frac{ROL}{(1 - PIS\ Cofins - TFSEE - R\&D - RGR)}$$

$$ROL = (CAA) * COM$$

$$COM = RABg_i * O\&M\ rate$$

Where:

- **ROL:** Annual Net Revenue;
- **ROB:** Annual Gross Revenue;
- **PIS/COFINS:** Percentage referring to taxes PIS/PASEP and COFINS;
- **TFSEE:** Inspection Fee for Electric Energy Services;
- **R&D:** Percentage referring to Research & Development Charge;
- **RGR:** Percentage referring to the Global Reversion Reserve charge.

Sector charges

Charge		Rate
RGR	Global Reversion Reserve	0.0 or 2.6%
TFSEE	Inspection Fee for Electric Energy Services	0.4%
P&D	Research & Development	1.0%

- Annual Gross Revenue is calculated from Net Revenue including all sector charges;
- In addition to the sector charges, depending on the concession contract, the amounts related to PIS/PASEP and COFINS contributions may compose the additional RAP.

Calculation Example - Additional RAP Portion (between cycles)

Premises



Case

Investment (R\$ Thousand)	1,000
Depreciation (30 years)	3.33%
Regulatory WACC	10.50%
O&M	2.00%
Operation Start Date	Year 0
Next Revision	Year 5

Sector Charges

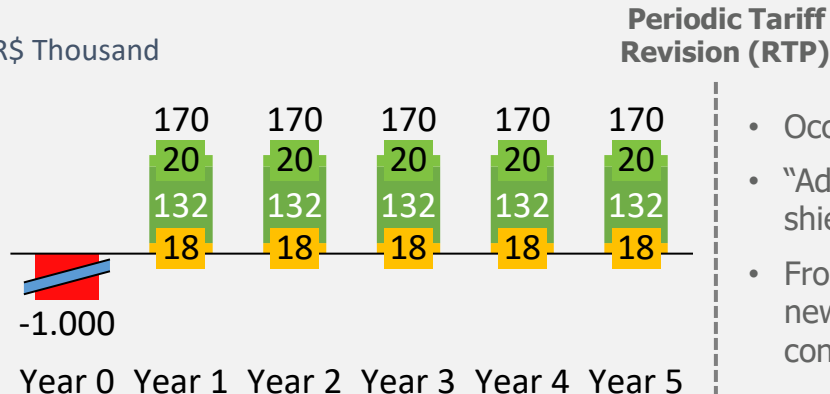
PIS/Cofins	9.25%
TFSSEE	0.40%
R&D	1.00%



(1) Net investment after the impact of REIDI based on the current ANEEL Price Bank.

RAP Flow

R\$ Thousand



- Occurs every 5 years;
- "Additional RAP" base is shielded;
- From this moment on, a new RAP base will be constituted.

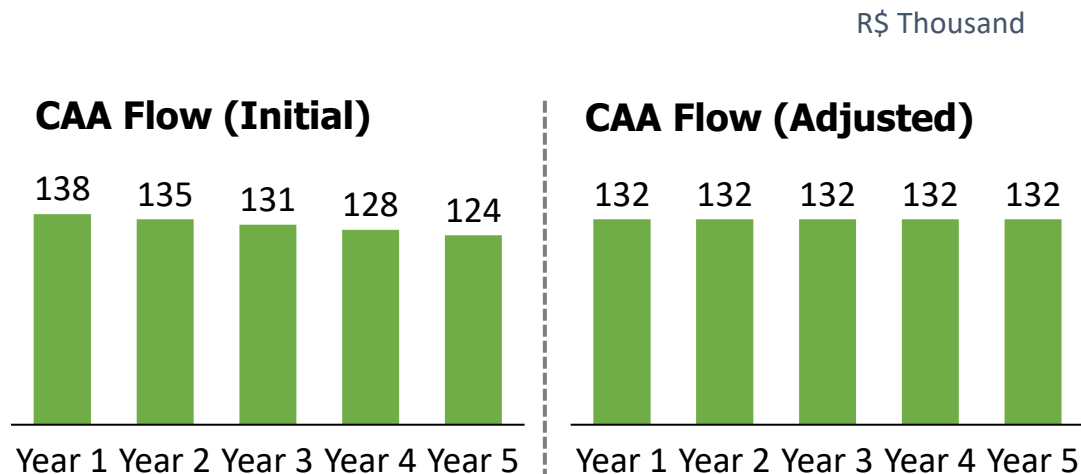
Investment CAOM CAA Sector Charges

Component calculation example

R\$ Thousand	Year 1	Year 2	Year 3	Year 4	Year 5
BRR Calculation Base					
BRR (Gross)	1,000	1,000	1,000	1,000	1,000
Depreciation	33	33	33	33	33
BRR (Net)	967	933	900	867	833
CAA Rational					
CAAE	138	135	131	128	124
CAAE (10.50%)	105	12	98	95	91
QRR (3.33%)	33	33	33	33	33
CAAE (VPL)	494				
CAA annualization Fee (ANEEL Formula)	27%				
CAA (ANEEL Calculation)	132				
CAOM Rational					
CAOM	20				
BRR (Gross)	1,000				
O&M (%)	2.00%				
Sector Charges Calculation					
CAA + CAOM	152				
Sector Charges	18				
Annual Additional Revenue	170				

Calculation suggestion for harmonizing the CAA

CAA Flow (Initial and Adjusted)



- The additional approved RAP **must be constant until the end of the tariff cycle**;
- An adjustment is made to the "CAA Flow (Initial)" in order to equalize the flow over the years.
- Both scenarios above have the same VPL discounted by the "regulatory WACC".

How to calculate

➤ Adjustment (ANEEL Formula);

- ANEEL suggests using the Formula below to calculate the VPL correction factor;

$$\left(\frac{rWACC_{pré}}{1 - (1 + rWACC_{pré})^{-m}} \right)$$

➤ Calculation suggestion;

- It is possible to arrive at the same result from the PGTO formula;

Premises	
Activation Year	Year 0
Revision Year	Year 5
Regulatory WACC	10.50%
CAPEX	1,000
Depreciation (years)	30
RAP CAA	132

Period (P) = Revision year – Year 0

Fee

Initial value (V.I)

Future value= V.I * [1 - P/depreciation]

04

Renewed TransCos OPEX is defined in a benchmarking method, with recognition of the efficient cost of providing the service.



In the periods between RTPs, the additional RAP associated with Reinforcements and Improvements are provisional and will only have their final value in the subsequent RTP.

05

06

In calculating the RAP (between cycles) capital remuneration is calculated on the net remuneration basis (with depreciation) and the QRR on the gross remuneration basis.



Periodic Tariff Revision (PTR) – Renewed

General aspects

It consists of calculating the Tariff Repositioning, where the Revenue is obtained in order to consider:

- Efficient operating costs
- Prudent incremental investments remuneration
- QRR – Regulatory Reinstatement Quota
- RAB Movements

$$\text{RAP} = (\text{CAA} + \text{CAOM} + \text{ET}) \pm \text{PA} - \text{OR}$$

Onde:

CAA = Annual Cost of Assets (Electric + CAIMI)
CAIMI = Annual Cost of Furniture and Real Estate
CAOM = Administration, Operation and Maintenance Costs
ET = Sector Charges and Taxes
PA = Adjustment Portion (Financial)
OR = Other Revenues

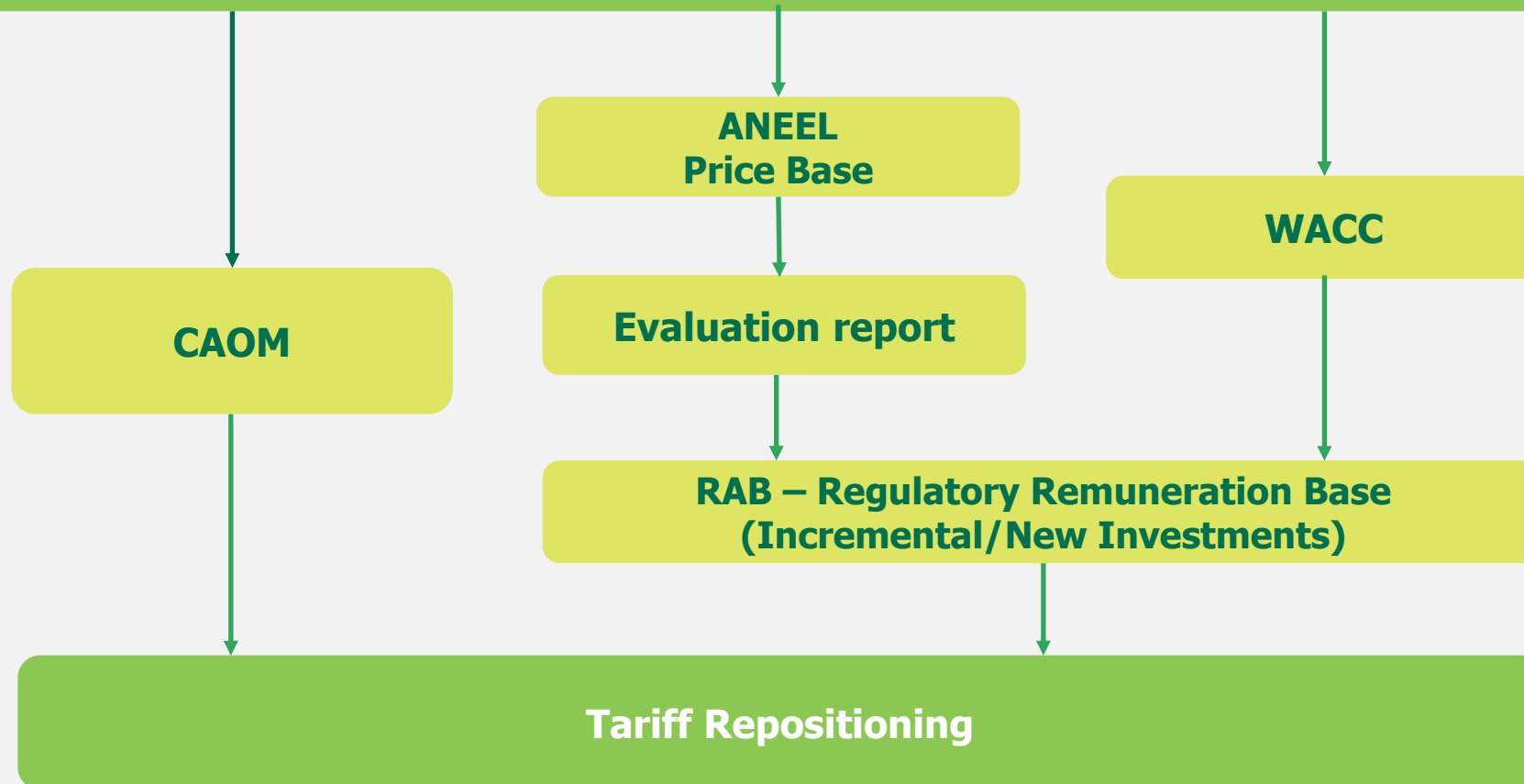
Procedures

- Application of Current Regulatory Return (WACC)
- Calculation of Efficient Operating Costs, using benchmarking, tracing the trajectory for the next tariff cycle (5 years)
- Composition and Evaluation of the Incremental Regulatory Asset Remuneration Base – RAB considering the rates of depreciation of the Electric Sector Asset Control Manual (MCPSE)
- CAA - return on capital is composed of depreciation and the return on capital (profitability), plus part of Furniture and Real Estate Costs (CAIMI).
- Treatment of Reinforcements, and Large-Scale Improvements
- Other Revenues - Tariff reduction

Periodic Tariff Revision (PTR) – Renewed



RBSE/RPC – Ordinance 120/2016 (R1 Report)
Indemnified Incremental Base – Ordinance 580/2012 (R2 Report)
Revised Incremental Base – Revised in Previous RTPs , i.e., RTP 2018 (R3 Report)
Incremental Base – Authorized and Operation in the last 5 years prior to RTP (R4 Report)



Periodic Tariff Revision (PTR) – Tendered

General aspects

It consists of calculating the Tariff Repositioning, where the Revenue is obtained in order to consider:

- Review on the cost of third-party capital and operating costs on revenues from the bidding process
- Remuneration basis of the tendered company is “shielded”
- Prudent incremental investments remuneration

$$\text{RAP} = [\text{NPV}(\text{PCF}; r_{\text{wacc}}; n) = 0]^* + [(\text{CAA} + \text{CAOM})_{\text{Incremental}}] \pm \text{AP} - \text{OR}$$

In which:

CAA = Annual Cost of Assets (Electric)
CAOM = Administration, Operation and Maintenance Costs
AP = Adjustment Portion (Financial)
OR = Other Revenues

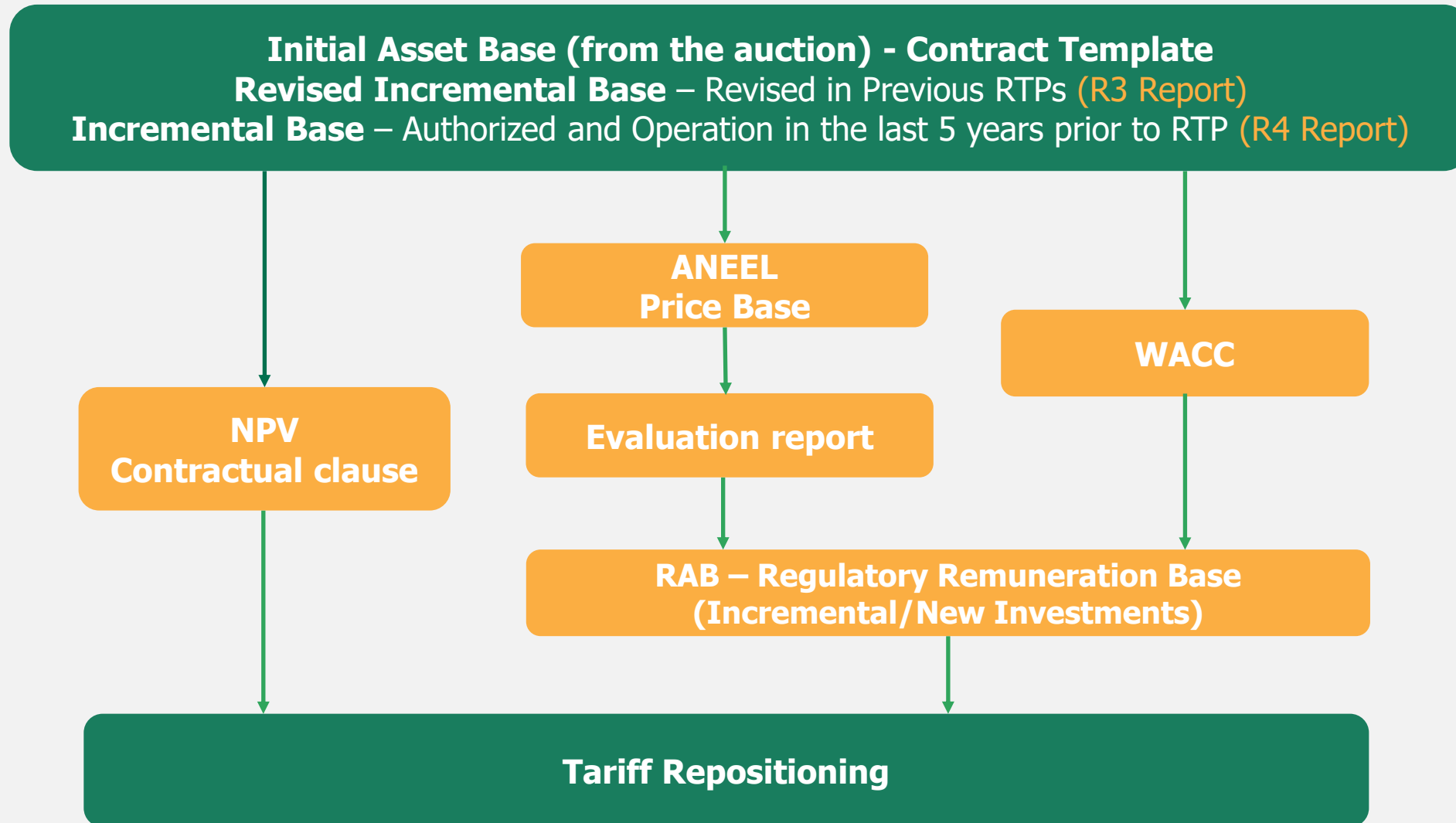
*Includes Financial Parameters, Depreciation, Charges, Taxes, O&M, etc.

Procedures

- Establish Third Party Capital Costs and the Regulatory Return (WACC)
- Tendered RAP revised by the Discounted Cash Flow Method, being obtained by the amount capable of making the net present value (NPV) of the project cash flow (PCF) equal to zero [Category 3, >=2007]
- Operating Costs Repositioning considering the “*Business Efficiency Gains*”¹
- Composition and Evaluation of the Incremental Regulatory Remuneration Asset Base – RAB (VNR method – New Replacement Value)
- CAA/Incremental - return on capital is composed of the depreciation and the return on capital (profitability)
- Treatment of Reinforcements, and Large-Scale Improvements
- Other Revenues - Tariff Reduction

⁽¹⁾ Includes technical efficiency, scale and technological evolution gains.

Periodic Tariff Revision (PTR) – Tendered



Remuneration – Transmission Regulatory WACC¹ (PRORET 9.1)

- **Ke** - risk free rate of return

Sample: NTN-B of the last 10 years (including reference year)

- **Kd** – based on the debentures issuance cost of companies in the sector

Sample: debentures issued by transmission or generation/transmission companies in the last 10 years

- **Capital structure** – considers Net Debt/EBITDA = **3x** for the highest indebtedness :

Ke: 55% | Kd: 45%

Updates: done annually, and once applied, is final until the next RTP

- For **reinforcements and improvements**, in the periods between revisions, the WACC in force in the respective year of authorization must be applied²

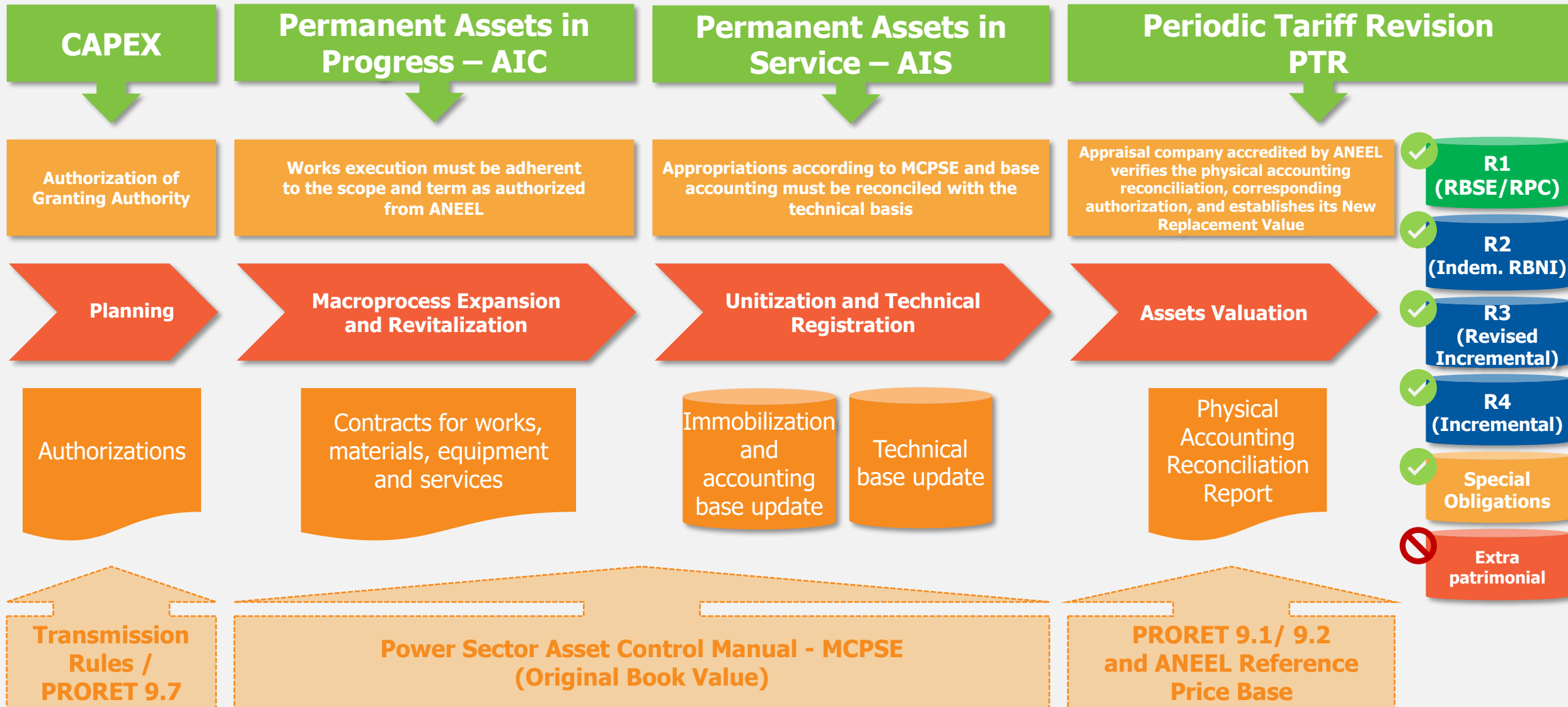
The r_{WACC} rates are calculated for the 5 years prior to the year of application, being:

- Ke's remuneration – average of the previous 5 years
- Kd remuneration - year before the year of application

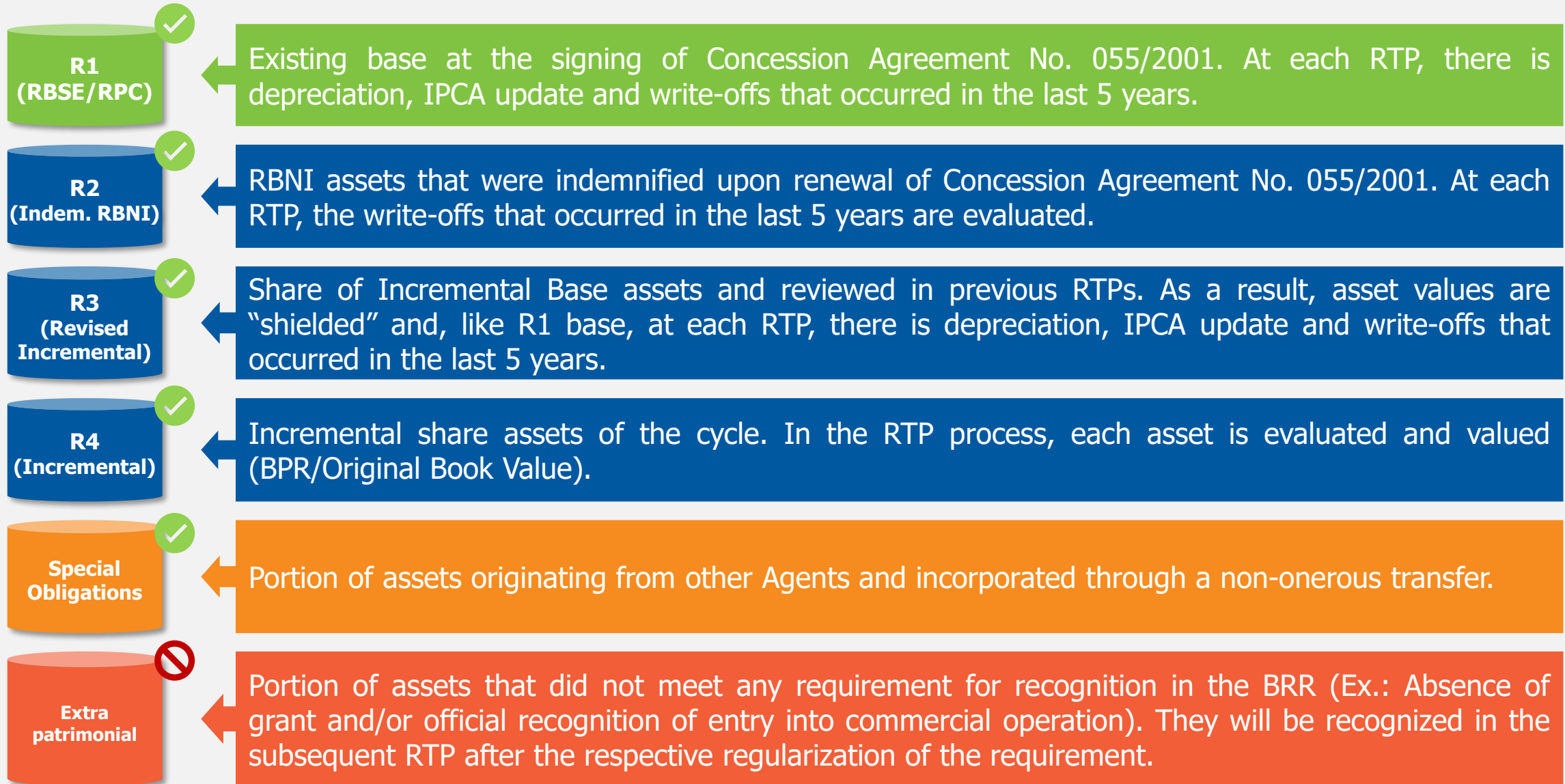
⁽¹⁾ WACC in effect, 2022/2023 Cycle: ANEEL Dispatch n. 544/2022.



Regulatory Remuneration Asset Base - RAB



Regulatory Remuneration Base



Other Revenues (Services / Sharing)

Activities:

- Revenue from Services Provided: Operation and Maintenance and Engineering
- Revenue from Services Provided: Consulting
- Communication System Revenue
- Infrastructure Sharing Revenue
- Research and Development (R&D) regulated by ANEEL

Net Revenue = Gross Revenue - Taxes

TransCo = 90% X Net Revenue
Destined to Tariff Reduction = 10% X Net Revenue

TransCo = 70% X Net Revenue
Destined to Tariff Reduction = 30% X Net Revenue

TransCo = 25% X Net Revenue
Destined to Tariff Reduction = 75% X Net Revenue

TransCo = 0% X Net Revenue
Destined to Tariff Reduction = 100% X Net Revenue

* Exceptions duly justified by the Transco may be revised.

TransCo = 70% X Net Revenue
Destined to Tariff Reduction = 30% X Net Revenue

Regulatory model¹

- For the purpose of tariff reduction, they are deducted from the Required Revenue, at the time of RTP.
- Each type of revenue has a percentage of net profit allocated to reduce tariffs.

ATA X PTR (Differences)

	ATA	Renewed PTR	Tendered PTR [Category 3, >=2007]
Periodicity	Yearly	Every 5 years	Every 5 years
Evaluation Scope	Reinforcements without prior establishment of additional RAP	Incremental Base	Incremental Base
Adjustments	Reinforcements and Improvements with prior establishment of additional RAP, which came into operation over the previous cycle	AP Establishment	AP Establishment
Correction Form	IPCA or IGP-M (all RAP linked to the Concession)	<ul style="list-style-type: none"> Revised Base Transactions Reassessment of the Incremental Base Benchmarking CAOM 	<ul style="list-style-type: none"> NPV Contract clause Reassessment of the Incremental Base O&M Reassessment "<i>Business Efficiency Gains</i>"
Adjustment Portion Annual Readjustment	Yes	No	No
Adjustment Portion Five-Year Revision	No	Yes	Yes
Other Revenues¹	No	Yes	Yes

(1) "ex-ante" Assessment" – revenue projection for the next cycle (assumed revenue) – in which in which presumed earnings of the Transmission Company providing the service for the next cycle are defined.

07

The Renewed Transmission RAB is composed by: RBSE (R1); compensated RBNI (R2); Revised incremental RBNI from previous cycles after contract renewal (R3) and compensated RBNI from the current cycle (R4).



The transmission regulatory WACC is updated annually. The reinforcements and improvements will have applied the current WACC applied in the year of its authorization, with redefinition on the next RTP.

08

09

The RTP of the Tendered TransCos is done with the review of the Kd (third parties) and business efficiency gains in the case of OPEX. Authorized investments and commercial operations between cycles are also reviewed (R4).



2. Regulatory X IFRS

What changes from one accounting criterion to another



- ✓ How to identify IFRS effects on the Financial Statement?
- ✓ What is the IFRS rationale?

Differences: Regulatory x IFRS

	Regulatory	IFRS
Asset Classification	Fixed/Intangible Assets.	Contract Asset.
Depreciation	Incurred according to the lifespan of the module/equipment.	N.A.
Construction Revenue	N.A.	Recognized as the work progresses, through the addition of CAPEX.
O&M Revenue	Recognized as part of the "total RAP" as of making the transmission system available.	Recognized when receipt of the RAP is incurred upon network availability and/or unavailability.
Remuneration Revenue	N.A.	Remuneration that reflects the financial cost of carrying out the investment.
Taxes (IT/SC and PIS/COFINS)	Calculated based on RAP billing and consequent Gross Income.	Adjustments arising from contract assets are reflected in current/deferred taxes.

Contractual Assets Remuneration

Disclosures – CPFL Transmissão Financial Statements (Portuguese only)

Revenue Classification in the income statement: Highlight the portion referring to revenue from remuneration of contractual assets in operating revenue.

(17) RECEITA OPERACIONAL LÍQUIDA

	CONTROLADORA				CONSOLIDADO			
	3° Trimestre 2022	9 meses 2022	3° Trimestre 2021	9 meses 2021	3° Trimestre 2022	9 meses 2022	3° Trimestre 2021	9 meses 2021
Receita Bruta								
Disponibilização do Sistema de Transmissão	301.426	868.963	299.969	941.168	301.426	868.963	299.969	941.168
Amortização Ativo Contratual	(158.502)	(506.974)	(174.236)	(500.883)	(158.502)	(506.974)	(174.236)	(500.883)
Remuneração do Ativo Contratual	259.224	724.936	194.103	574.267	263.215	737.006	198.221	586.711
Energia Elétrica de Curto Prazo	-	-	(2.388)	-	-	-	(2.388)	-
Receita de Construção	30.800	110.525	7.825	81.042	32.716	116.845	18.226	106.229
Outras Receitas	5.509	14.057	2.385	9.887	6.214	16.170	4.080	14.950
	438.456	1.211.507	327.658	1.105.481	445.069	1.232.010	343.872	1.148.175
Deduções da Receita								
PIS/COFINS	(26.359)	(78.318)	(27.433)	(86.533)	(26.586)	(78.879)	(27.598)	(87.028)
Quota RGR	-	(937)	(618)	(1.372)	(133)	(1.400)	(783)	(1.902)
Outros Encargos	(6.500)	(22.088)	(3.857)	(15.658)	(6.500)	(22.088)	(3.857)	(15.658)
Conta de Desenvolvimento Energético - CDE	(23.901)	(74.622)	(25.727)	(76.999)	(23.901)	(74.622)	(25.727)	(76.999)
Encargos do Consumidor - P&D / MME / FNDCT	(2.414)	(6.836)	(2.390)	(7.561)	(2.470)	(6.975)	(2.472)	(7.771)
Taxa de Fiscalização Serviço Energia Elétrica - TFSE	(899)	(2.570)	(788)	(2.871)	(920)	(2.627)	(806)	(2.922)
Compensação Financeira Pela Util Rec Hidr - CFURH	-	-	1.155	-	-	-	1.155	-
Outras deduções	(665)	(1.826)	(148)	(1.529)	(665)	(1.826)	(148)	(1.529)
	(60.737)	(187.197)	(59.806)	(192.523)	(61.175)	(188.417)	(60.236)	(193.809)
Receita Operacional Líquida	377.719	1.024.310	267.852	912.958	383.894	1.043.593	283.636	954.366

Contractual assets movement

Disclosures – CPFL Transmissão Financial Statements (Portuguese only)

Disclosure made through explanatory notes of the contractual asset, containing changes in the period and current RAP's:

(8) ATIVO CONTRATUAL

	CONTROLADORA					CONSOLIDADO	
	Contrato 080/2002 Lote A	Contrato 055/2001 RBSE	Contrato 055/2001 RBNI	Contrato 004/2021 Lote 6	Total	Contrato 001/2011 TESB	Total
Saldo em 31 de dezembro de 2021	61.276	1.523.804	1.164.318	8.282	2.757.680	341.894	3.099.574
(+) Adições.....	-	-	92.344	18.181	110.525	27.608	138.133
(+) Remuneração	24.585	483.669	216.683	-	724.936	12.070	737.006
(-) Baixas.....	-	-	(41)	-	(41)	-	(41)
(-) Amortização do período.....	(10.060)	(341.915)	(155.000)	-	(506.974)	(20.150)	(527.124)
(-) Outros.....	-	-	9.042	-	9.042	(27.609)	(18.567)
Saldo em 30 de setembro de 2022	75.801	1.665.558	1.327.346	26.463	3.095.169	333.813	3.428.982
 Em 30 de setembro de 2022- Circulante	13.413	337.115	164.625	-	515.153	26.866	542.019
Em 30 de setembro de 2022 - Não Circulante	62.388	1.328.442	1.162.721	26.463	2.580.014	306.947	2.886.961

3. Sector Challenges





- **Add value through:**
 - Growth in the Remuneration Base – Investments
 - Operational Efficiency – Renewed and more efficient Transmission Companies
- **Sectoral Planning Horizon indicates R\$ 158,3 billion investment in transmission in the 2023-2032 period**
 - Market service capacity - Equipment Suppliers, Builders
 - Competitiveness of Transmission Auctions
- **Ageing Assets**
 - Investments Potential of around R\$55.9 billion in replacing assets in substations with exhausted regulatory useful life
- **Transmission regulation maintaining its predictability and transparency**

*Source: Decennial Energy Expansion Plan 2032 - Energy Research Company – EPE (<https://www.epe.gov.br/pt/publicacoes-dados-abertos/publicacoes/plano-decenal-de-expansao-de-energia-2032>).



Talk to IR

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