

# EFU GOVERNMENT EFFICIENCY LICENCE v1.0

## Public Administration Biophysical Efficiency Audit Standard

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**Release:** 2026.01.12

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## 0. Overview

The **EFU Government Efficiency Licence (EFU-GOV)** is an experimental biophysical audit framework for evaluating public administrations, including central and local governments and state agencies.

- **Purpose:** Focuses on measuring physical footprint and decision-making entropy, instead of traditional financial audits.
  - **Key question:** Does an agency consume more than it generates?
  - **Answer:** The EFU-GOV metric provides an objective measure.
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## 1. Normative references

This is an EFU-specific standard. Currently, there are no mandatory references. Future **EFU Core Methodology** documents may be cited here if available.

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## 2. Terms and definitions

| Term                              | Definition                                                                                                                                             |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>EFU (Equivalent Flux Unit)</b> | Biophysical unit representing human impact on Earth system functions.                                                                                  |
| <b>EFU-GOV vector</b>             | Institution-specific components: EFU_P, EFU_E, EFU_M, EFU_T, EFU_D.<br>Represents annual metabolic impact.                                             |
| <b>TEFU_GOV</b>                   | Weighted sum of the vector components: $TEFU\_GOV = 1.1 \times EFU\_P + 1.3 \times EFU\_E + 1.2 \times EFU\_M + 1.0 \times EFU\_T + 2.5 \times EFU\_D$ |
| <b>Decision Entropy (EFU_D)</b>   | Energy loss due to administrative delays: $EFU\_D \propto (\text{Delay} \times \text{Case Volume}) / \text{Administrative Capacity}$                   |
| <b>RGCC_GOV</b>                   | Regional Government Carrying Capacity – biophysically sustainable EFU allocation for public administration                                             |

| Term                     | Definition                                                                                          |
|--------------------------|-----------------------------------------------------------------------------------------------------|
| SS_GOV                   | Government Sovereignty Gap: $SS\_GOV = TEFU\_GOV\_total - RGCC\_GOV$                                |
| MROI_GOV                 | Metabolic ROI: $MROI\_GOV = (Public\ Service\ Accessibility \times Legal\ Certainty) / TEFU\_GOV$   |
| Institutional parasitism | Condition where $TEFU\_GOV$ persistently exceeds $RGCC\_GOV$ and $MROI\_GOV$ falls below threshold. |

### 3. EFU-GOV Methodology

#### 3.1 Vector components

| Component | Definition                                                                |
|-----------|---------------------------------------------------------------------------|
| EFU_P     | Paper & logistics – administrative waste, mailings, printing              |
| EFU_E     | Office energy – energy consumption of IT systems, servers, and buildings  |
| EFU_M     | Hardware & fleet – vehicle and equipment amortization                     |
| EFU_T     | Travel & inspection – kinetic energy of official movement and site visits |
| EFU_D     | Decision entropy – metabolic overhead caused by backlog and delays        |

#### 3.2 Master formula (Word-friendly)

$$TEFU\_GOV = 1.1 \times EFU\_P + 1.3 \times EFU\_E + 1.2 \times EFU\_M + 1.0 \times EFU\_T + 2.5 \times EFU\_D$$

- **Weighting:** Decision entropy has the highest weight – delays cause the largest societal energy loss.
- **Normalization options:** per 1,000 inhabitants, per FTE staff, or per 10,000 cases.
- **Measurement period:** typically 1 calendar year.

### 4. Strategic indicators

| Indicator | Definition                                                             | Interpretation                                                                   |
|-----------|------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| SS_GOV    | $TEFU\_GOV\_total - RGCC\_GOV$                                         | $\leq 0 \rightarrow SOVEREIGN$ ; $> 0 \rightarrow overshoot$                     |
| MROI_GOV  | $(Public\ Service\ Accessibility \times Legal\ Certainty) / TEFU\_GOV$ | $< 1.0e-3 \rightarrow$ the agency consumes more societal energy than it protects |

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## 5. Licence levels

| Level | SS_GOV                    | MROI_GOV    | Label             | Interpretation                             | Color                           |
|-------|---------------------------|-------------|-------------------|--------------------------------------------|---------------------------------|
| 1     | $\leq 0$                  | $\geq 1e-2$ | EFU-GOV SOVEREIGN | Optimized e-government                     | <input type="checkbox"/> Green  |
| 2     | $0 < SS \leq 15,000$      | $\geq 5e-3$ | EFU-GOV BALANCED  | Hybrid digital-analog systems              | <input type="checkbox"/> Yellow |
| 3     | $15,000 < SS \leq 75,000$ | $\geq 1e-3$ | EFU-GOV DEFICIT   | Significant bureaucratic friction          | <input type="checkbox"/> Orange |
| 4     | $> 75,000$                | $< 1e-3$    | EFU-GOV CRITICAL  | Institutional parasitism / systemic crisis | <input type="checkbox"/> Red    |

### Benchmark examples:

- **e-Estonia:** High digital adoption, low EFU\_D → **SOVEREIGN**
- **Centralized Legacy Admin:** High EFU\_P + delays EFU\_D → **CRITICAL**

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## 6. Data sources & Applications

### 6.1 Data sources

- **Tier 1:** Direct measurement – energy bills, paper usage, GPS fleet data, meters
- **Tier 2:** System logs – case management, days/deadline ratios, digital service adoption rates

### 6.2 Use cases

- Procurement reform audits
- Public sector downsizing analysis
- Digital transition benchmarking
- Cross-country governance comparison

### 6.3 Licence terms

- **Permitted:** self-audits, independent audits, academic benchmarking, public dashboards
- **Required attribution:**

“EFU Government Efficiency Licence v1.0 – István Simor (2026)”

- **Prohibited:** greenwashing, data suppression, misuse of SOVEREIGN/BALANCED labels
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## 7. Informative Annex A – Pilot Audit Example

### BUDAPEST MUNICIPAL ADMIN – 2026

#### Component Value (EFU)

EFU\_P 450

EFU\_E 1200

EFU\_M 380

EFU\_T 250

EFU\_D 1800

TEFU\_GOV 5125

RGCC\_GOV 4200

SS\_GOV 925 (>0)

MROI\_GOV 4.2e-3

#### Level: EFU-GOV DEFICIT (Level 3)

#### Recommendations:

- Accelerate case digitization (reduce EFU\_D)
  - Consolidate office space (reduce EFU\_E)
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