IPA III Results Framework Indicator Methodology Note

1. Indicator code and name

IPA III RF 3.2.3.3: Number of people with new or improved access to electricity

2. Technical details

OPSYS and Results Dashboard code: 65197,65198.

Unit of measure: Number of (#)

Type of indicator: Quantitative: Numeric; Actual (ex-post); Cumulative (not annual).

<u>Level of measurement</u>: this is an **outcome** indicator. It would logically be associated with an outcome such as " Increased, improved and inclusive access to affordable, reliable, sustainable, and modern energy".

Disaggregation:

- The indicator must be disaggregated by a) New access OR b) Improved access
- Where relevant / possible, please disaggregate by: gender; age; location (urban/rural/periurban), on-grid/off-grid.

Any disaggregation should be agreed with the relevant ministry or IP in advance.

DAC sector codes: 23110; 23181; 23182

Main associated SDG: SDG 12 - Ensure sustainable consumption and production patterns.

Other associated SDGs: SDG 7 - Affordable and clean energy and to SDG 9 - Industry, innovation and infrastructure.

Associated IPA III Level 1 indicator:

• Proportion of population with primary reliance on clean fuels and technology (%) (source: SDG 7.1.2) (Ind. 3.2.3)

Associated IPA III Level 3 indicators:

- Amount and share of EU-funded external assistance contributing to: (a) climate change (adaptation and mitigation), (b) protecting biodiversity, c) combating desertification, (d) protecting the environment (Aid to Env)
- Amount and share of EU-funded external assistance directed towards digitalisation
- Leverage of EU blending and guarantee operations financed by EU external assistance, measured as: (a) Investment leverage ratio, (b) Total eligible financial institution financing leverage ratio, (c) Private financing leverage ratio

3. Policy context and Rationale

- IPA III PF: Window 3 Green Agenda and Sustainable Connectivity, Thematic Priority
 2: Transport, digital economy and society, and energy.
- Chapter of the Acquis: The main concerned chapters of the EU acquis under this section are chapter 15 (Energy) and chapter 21 (Trans-European networks), distributed in clusters 2 (Internal Market), 3 (Competitiveness and Inclusive Growth) and 4 (Green agenda and sustainable connectivity), included in cluster 4 (Green agenda and sustainable connectivity).

 The indicator corresponds to the EFSD+ IW2 – Energy, and to GERF indicator 2.9 "Number of people with access to electricity with EU support through: (a) new access, (b) improved access". It supersedes previous IPA Performance Framework Indicator 2.26 (2020) "Number of individuals provided with access to electricity with EU support through: a) new access, b) improved access"

The <u>Energy Community Treaty</u> created in 2006 an internal market in electricity and natural gas bringing together the 28 Member States of the European Union (EU) and 6 European states and territories in the Balkans (Albania, Bosnia and Herzegovina, Macedonia, Montenegro, Serbia and Kosovo).

The **Clean energy for all Europeans** package encompasses policy regulations to make the electricity market more interconnected, flexible and consumer-centred, to ensure the security of electricity supply in crisis situations (risk-preparedness in the electricity sector); to strengthen the role and functioning of ACER - the Agency for the Cooperation of Electricity Regulators; to set the path for Europe's transition towards clean energy sources. The current <u>Renewable Energy Directive (RED) 2018/2001/EU</u> is part of the <u>Clean energy for all Europeans package</u> and aims to keep the EU a global leader in renewables, helping it to help to decarbonise EU's energy system in line with the <u>European Green Deal</u> objectives and the Paris Agreement. The directive establishes a new binding renewable energy target for the EU for 2030 of at least 32%, with a clause for a possible upwards revision by 2023.

IPA III support will place a strong emphasis on energy market integration (including within the framework of the Energy Community Treaty), decarbonisation and just transition, increased digitalisation of the system and smart grids, demand-side and supply-side, energy efficiency, including modernisation of district heating, and energy security. For the IPA III beneficiaries to reap all the benefits from a massive injection of renewable energy in the system (energy security, affordability, sustainability and reliability) a fully functional regional energy market has to be set up. This requires a set of institutions and regulations in place that have to be designed and implemented by the different governments. However, the final objective is to have the regional energy market integrated within the EU internal market, so that the full potential of the continental resources can be harnessed.

The Trans-European Networks for Energy (TEN-E) strategy, which is focused on linking the energy infrastructure of EU countries, is part of the legislative framework of the Energy Community and has to be adopted by all parties. For the members of the Energy Community Treaty, projects included either in the list of <u>projects of the Energy Community interest</u> ("PECIs") or in the list of projects of Mutual Interest (PMI) will be given a priority status.

To know more on EU policies, measures and progress towards energy production from renewable sources you can consult <u>Eurostat sources</u>.

4. Values to report

All of the following values must be determined according to the definitions provided in Section 5 below.

• Reporting values in the logframe:

- **Baseline value**: The value assumed by the indicator at time t0, against which progress will be assessed.
- Reporting of current value is done at least once a year. Current values to be reported is the highest total number of individuals with new or improved access to electricity <u>at</u> <u>any given year</u> of the IPA supported intervention and according to the applicable

definitions provided in section 5 of the note. Be aware that contribution to results is not calculated on cumulative basis.

- **Final target value**: estimated total number of individuals by the target year and according to the applicable definitions provided in section 5 of the note.
- Intermediate targets (milestones). A tool has been developed in OPSYS to automate the generation of intermediate targets¹.
 - For outputs, the intermediate targets are generated using a linear interpolation between the baseline and target values because it is assumed that outputs materialise sooner and more progressively over implementation (than outcomes).
 - For outcomes, the expected progression over the course of implementation will vary across interventions. During the creation of a logframe, the expected outcome profile must be selected (OPSYS offers four options²) and this selection triggers the generation of intermediate targets for all 30 June and 31 December dates between the baseline and target dates for all output and outcome quantitative indicators. All automatically generated intermediate targets values and dates can be subsequently modified by the Operational Manager or the Implementing Partner with the approval of the Operational Manager.
- 5. Calculation of values

The value for this indicator is calculated by counting the **Number of individuals**, using the Technical Definitions and Counting Guidance provided below. Please double check your calculations using the Quality Control Checklist below.

Technical Definitions

- [EFSD+] Additional number of **people** with access to electricity through new or improved **household connections** supported by the project. This indicator includes only household access to electricity; individuals gaining electricity access from firms and government institution buildings are excluded.
- Improved access: a connection will be considered as improved when its classification in the multi-tier matrix developed by the World Bank (<u>ESMAP</u>) for measuring access to household electricity supply has been moved into a higher category with investment support.
- Electricity generated by renewable, stand-alone electricity systems, such as solar home systems (at least tier 2 based on the multi-tier matrix for measuring energy access), small hydropower plant, wind turbine, generator operating with biofuel, biogas or solid biomass. For solar photovoltaic systems, we consider that the system has to be at least in tier 2. The system should provide enough electricity to cover lighting, phone charging, TV and fans requirements if needed. Please see more details of the definitions at: http://www.minigridpolicytoolkit.euei-pdf.org/policy-toolkit

¹ This has been done in the framework of the **Intervention Performance Assessment.** Two composite indicators have been developed to provide an overall assessment of an intervention's current implementation and future prospects. These scores will be calculated for all NEAR interventions participating in the annual results data collection exercise.

The implementation score reflects the relevance, efficiency and effectiveness already achieved by the intervention. The information on relevance is provided by the Operational manager's response to a question in a survey. The information on efficiency and effectiveness is provided by the logframe data, if sufficiently available, or the response to a question in a survey, if not.

The risk score reflects expectations regarding the most probable levels of relevance, efficiency, effectiveness and sustainability to be achieved by the intervention in the future. In this case, all the information is provided by the Operational manager's responses to questions in a survey.

 $^{^{2}}$ a. Constant: The outcomes are achieved continuously throughout implementation; b. Accelerating: The outcomes are achieved towards the end of implementation; c. At the end: The outcomes are mostly achieved at the end of implementation; d. None of the above.

• **Off-grid and on-grid**, where off-grid means that the power generator is not connected to publicly or privately managed electricity utilities (the grid).

Counting Guidance

- **Reference to possible double-counting:** there are risks of double-counting in the case of persons who access electricity for longer than one reporting period. To discount this risk, contribution to results will be reported as the highest value obtained over the reporting periods and not as cumulative figures.
- Data calculation: If data are provided in number of households (HH) or contract holders, the estimated total number of individuals with improved access to electricity is calculated by multiplying the number of HH by the average size of the HH of the municipality, the region, the country as available in the most up to date figures. The same method applies for gender and age disaggregation and rural/urban disaggregation, unless the IP's monitoring system provides accurate figures.

If any information is not available the following assumptions could be applied as a last resort:

- 1 household per connection
- Average of 5 persons per household.

Please use intervention data to disaggregate by sex as much as possible. Where this information is not available, please apply the relevant regional (or last resort national) sex ratios to the overall number of people.

Quality Control Checklist

- 1. Has double counting been avoided as indicated in the Counting Guidance above?
- 2. Have all relevant disaggregations been reported?
- 3. Has the baseline and final target been encoded with the right dates?
- 4. Did you encode the latest current value available?
- 5. Did you use the comment box to inform on the values encoded?

6. Examples of calculations

In a candidate country, a four-year EU intervention supports public-private partnership initiatives to improve access to electricity in three municipalities with rural or underserved areas. In a previous EU-funded intervention, network design studies and environmental, social and economic impact studies were conducted to guide the upgrading and extension of on-grid distribution lines. According to the electric utilities, in Year 0, the number of HH (clients) included in their database for the three municipalities was: for 1) 15 000 (75% in urban, 25% peri-urban); for 2) 7 000 (all urban, the only classified zone in the municipality); for 3) 4 500 (all in urban). The latest census data for the province where 1), 2), and 3) are located estimates that the gender ratio is 1/1. The average size of the HH in the province is 5.25 persons per HH. For achieving 100% of HH coverage, the following HH should be added to the service: in 1) 1 400 (all rural); in 2) 2 000 (all peri-urban); in 3) 2 000 (urban), 1 000 (peri-urban) and 700 (rural). At the end of the current year of implementation, full access was achieved in municipality 2, but works haven't started yet in municipalities 1 and 3.

Baseline values

Baseline persons	Municipality 1	Municipality 2	Municipality 3
	HH	HH	HH

Total	26 500*5.25 = 139 125	15 000	7 000	4 500
Urban	22 750*5.25 = 119 438	11 250	7 000	4 500
Peri- urban	3 750*5.25= 19 687	3 750	0	0
Rural	0	0	0	0
Men	139 125 /2= 69 562			
Women	139 125 /2 =69 563			

Final target values

	Target values persons	Municipality 1 HH	Municipality 2 HH	Municipality 3 HH
Total	33 600*5.25 = 176 400	15 000+ <i>1 400</i>	7 000+2 <i>000</i>	4 500+3 <i>700</i>
Urban	24 750*5.25 = 129 938	11 250	7 000	4 500+2 000
Peri- urban	6 750*5.25= 35 437	3 750	+2 000	+1 000
Rural	2 100*5.25 = 11 025	+1 400	0	+700
Men	176 400 /2= 88 200			
Women	176 400 /2= 88 200			

Current value

	Current values persons	Municipality 1 HH	Municipality 2 HH	Municipality 3 HH
Total	28 500*5.25 = 149 625	15 000	7 000+2 <i>000</i>	4 500
Urban	22 750*5.25 = 119 438	11 250	7 000	4 500
Peri- urban	5 750*5.25= 30 187	3 750	+2 000	0
Rural	0	0	0	0
Men	149 625 /2= 74 812			
Women	149 625 /2= 74 813			

7. Data sources and issues

Data sources in the logframe:

- Data for this indicator must derive directly from the intervention; i.e. intervention monitoring and reporting systems from implementing organisations (e.g. governments, international organisations, non-state actors,...).
- Data cannot be drawn from official statistics for a country since these will not respond to the results influenced by the intervention. The estimated number of people reached by the intervention should be stated in the intervention feasibility study or appraisal report. While estimates are expected to be available at the design stage of the intervention, actual

values should be collected by the implementing partner's (IP) monitoring system based on utilities' customers records.

- Data on household size and thereby number of individuals should come from: latest reports
 of the utilities on coverage of their existing electricity contracts. Links to municipal
 population data or latest census data, used to estimate the number of individuals (see
 section 7 of the note). Where this is not possible, information on selected countries can
 be found United Nations Database of Household Size and Composition 2022 https://population.un.org/Household/index.html
- Other possible sources include studies carried out in the framework of the interventions and external monitoring and/or evaluation reports.

Data source categories specified in OPSYS:

- EU intervention monitoring and reporting systems (Progress and final reports for the EUfunded intervention.
- EU-funded feasibility or appraisal reports.
- ROM reviews;
- International organisation data portals and reports (UN Database of Household Size and Composition, https://population.un.org/Household/index.html)

8. Reporting process & Corporate reporting

Who is responsible for collecting and reporting the data?

- The implementing partner (i.e. the entity responsible for delivering the infrastructures improvements) will need to ensure the counting starts at the lowest level of intervention and is reported upwards and aggregated for the entire intervention in the framework of regular monitoring and reporting systems.
- Data verification:
 - For indirect management by beneficiary countries, the National IPA Coordinator will verify the data.
 - For other modes of implementation, the Operational Manager in HQs/EUD will verify the data.
- It is then the responsibility of DG NEAR to receive and verify data for this indicator from all relevant interventions and to eventually ensure aggregation within and across all IPA Beneficiaries.

This indicator is used for corporate reporting in the following contexts:

• IPA III via the Annual Report

This indicator has been included in the following other Results Measurement Frameworks:

- NDICI (GERF 2.9)
- EFSD+
- 9. Other uses

IPA III RF 3.2.3.3 can be found in the following groups of EU predefined indicators available in OPSYS, along with other related indicators:

- "EU RF Level 2 (EURF L-2);
- Energy (E);
- European Fund for Sustainable Development (EFSD);
- European Fund for Sustainable Development PLUS (EFSD+);
- GE RF Level 2 (GERF L-2);
- IPA III RF Window 3: Green agenda and sustainable connectivity (IPA III W3);

- IPA Performance Framework (IPA PF 2);
- NEAR EU RF level 2 (EU RF 2);
- NEAR GERF L2 (GERF 2)"

For more information, see: <u>Core indicators for design and monitoring of EU-funded interventions</u> | <u>Capacity4dev (europa.eu)</u>

World Bank Group: "People provided with new or improved electricity services"

Harmonized Indicators for Private Sector Operations (HIPSO): EN-03 and EN-04 Used by the EU:

Instrument for Pre-accession Assistance Performance Framework (IPA PF): 2.26 (2020)

EU Platform for Blending in External Cooperation: EUBEC 1.5

Western Balkans Investment Framework (WBIF):

European Fund for Sustainable Development Plus (EFSD+): Yes

<u>Results indicators for European Regional Development Fund</u> (ERDF): RCR 33 - Users connected to smart energy systems

<u>Core set of performance indicators for ERDF and Cohesion Fund</u>: CCR 07 - Additional users connected to smart energy systems

10. Other issues

This indicator is also an EFSD+ indicator. The contents of this note have been adapted to be used in IPA III RF, therefore, they are not necessarily applicable to other contexts as the specifications of the EU acquis are not always in application in third countries eligible to EFSD+ funds