



Danube Region RES Monitoring Project

*8th Steering Group Meeting of the Priority Area 2
Prague, 9th July, 2014*

László Szabó, PhD
Regional Centre for Energy Policy Research (REKK)

Introduction

- ▶ Published by the EUSDR PA2
- ▶ Carried out between 2012–2013

Outline

- ▶ Case studies for 14 countries;
- ▶ Questionnaire;
- ▶ Areas:
 - General (share, importance of RES);
 - Licensing;
 - Grid integration;
 - Support schemes;
 - Cross-border cooperation;
- ▶ Cross-country Assessment;
- ▶ 14 Country reports

Country respondents

	Country	Respondent
DE	Germany	Expert
CZ	Czech Republic	Regulator
AT	Austria	Regulator
SI	Slovenia	Regulator
SR	Slovakia	Ministry
HU	Hungary	Regulator
BA	Bosnia y Herzegovina	Regulator
RS	Serbia	Expert
BG	Bulgaria	Expert
RO	Romania	Expert
UA	Ukraine	Regulator
CR	Croatia	Regulator
ME	Montenegro	Regulator
MD	Moldova	Regulator

Methodology

- ▶ Based on questionnaire survey;
- ▶ Quality control:
 - Cross-check with external sources;
 - Ask for revision if discrepancy tarced;
- ▶ Reflects data until 2012;

Structure of survey 1.

▶ 1. General part:

- On RES-E production level
- On consumption/prices
- Targets

▶ 2. Licensing:

- No. of authorities
- Length of process
- Certification:
 - Certification of origin exists
 - Responsible authorities

▶ 3. Grid Integration:

- Priority connection
- Allocation rule (FCFS, Tendering...)
- Deep vs. Shallow cost allocation
- Grid access
 - Priority rule
 - Forecasting obligation responsibility
- Balancing rules
 - Different from general?
 - Penalties
- Date closure
- Intraday exists/not

Structure of survey 2.

▶ 4. Support scheme

- Financing source
- Recent changes
- Existence of cap (on budget, quantity of RES...)
- Revision period
- Overall cost description of FIT-FIP schemes
 - Overall Budget
 - Quantity of RES-E supported
 - Incentive component
- What design elements apply (techn. differentiation, vintage, location...)
- Method of tariff setting (cost plus, benchmark...)

▶ 5. Cross-border cooperation

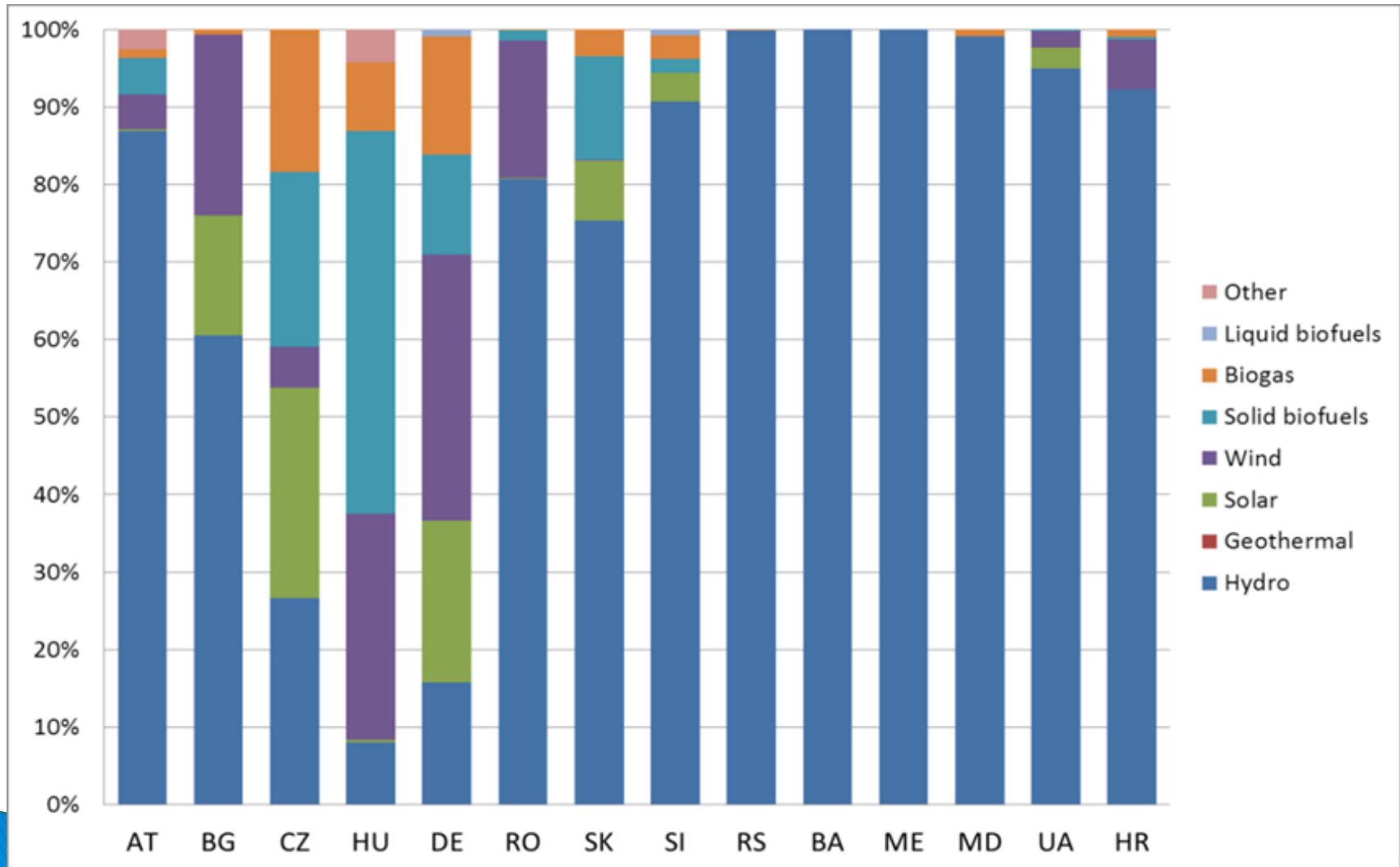
- Applied any form
- Planning to use
- Would be interested to use

There is a separate paper on the flexibility mechanisms in the DR region.

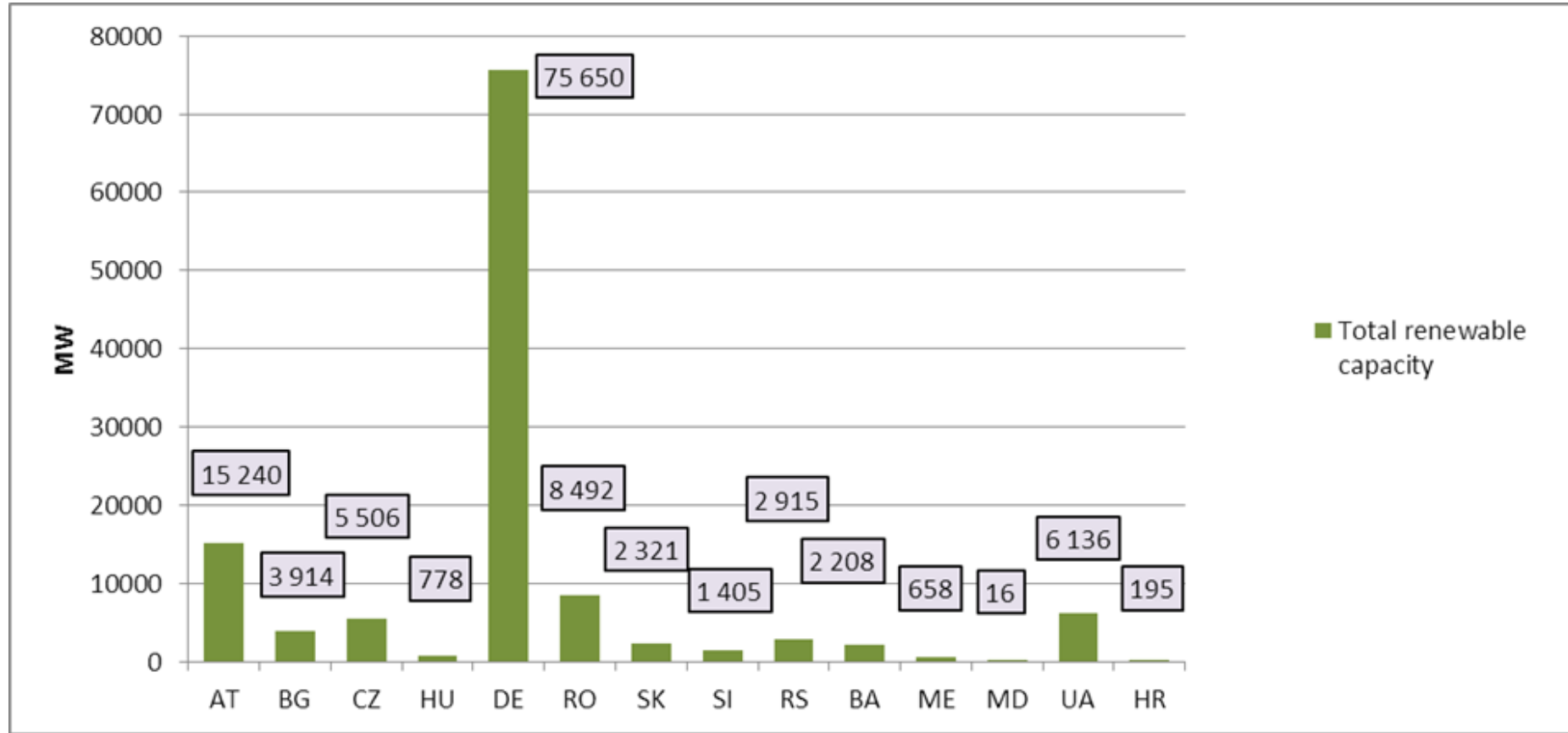
(to be presented later)

Main findings of Cross-country survey

Composition of renewable electricity generation by source in the surveyed countries



Installed RES-E capacity by country and source



Licensing

		Overall lead time		
		below 9 months	9-24 months	above 24 months
Authorities involved	0 - 5	DE, ME		
	5 - 15	SK, SI, MD	AT, BG, CZ RO, UA, HR	RS
	above 15			HU, BA

Grid Integration

Table 1.2 Issues related to grid connection

Level of priority granted for RES-E plants when <u>connecting</u> to the grid	<i>priority</i>	<i>non-discriminatory</i>	<i>other</i>
	BG, CZ, DE, SK, SI	AT, RO, RS, BA, ME, MD, UA, HR	HU
Allocation of scarce RES-E connection opportunities in case of scarce grid connection capacity	<i>first come first served</i>	<i>competitive bidding (tender)</i>	<i>other</i>
	AT, BA, BG, CZ, DE, HR, MD, RO, RS, SK, SI, UA	HU	ME
Cost sharing regime of grid connection	<i>shallow</i>	<i>non-shallow</i>	
	BG, RS, MD, DE	AT, BA, CZ, HR, HU, ME, RO, SK, SI, UA	
Does the connection charges regime for RES-E plants differ	<i>no</i>	<i>yes</i>	
	AT, BA, BG, CZ, DE, HR, MD, ME, RO, RS, SI, UA	HU, SK	

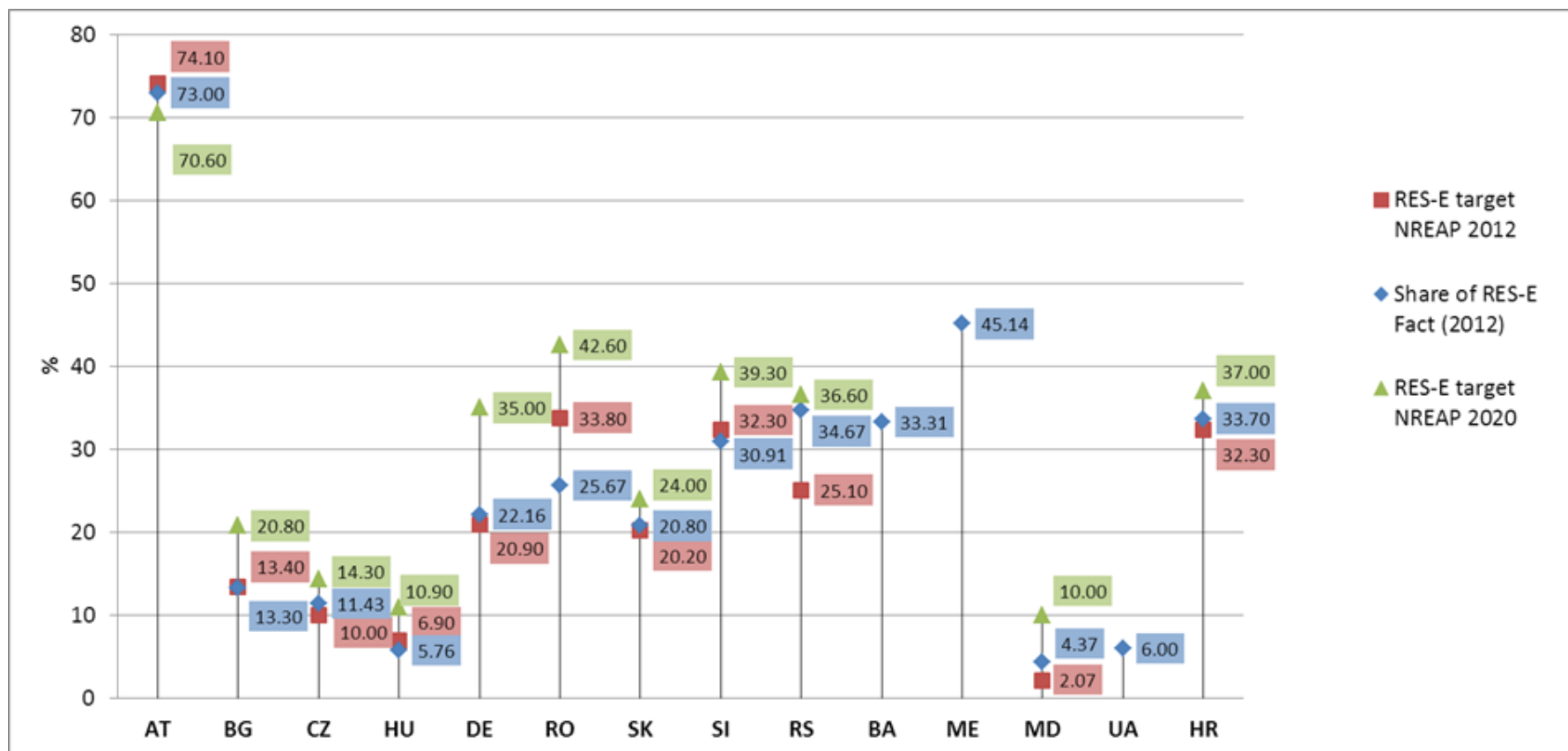
Source: REKK RES-E Survey 2013.

Table 1.3 Issues related to grid access

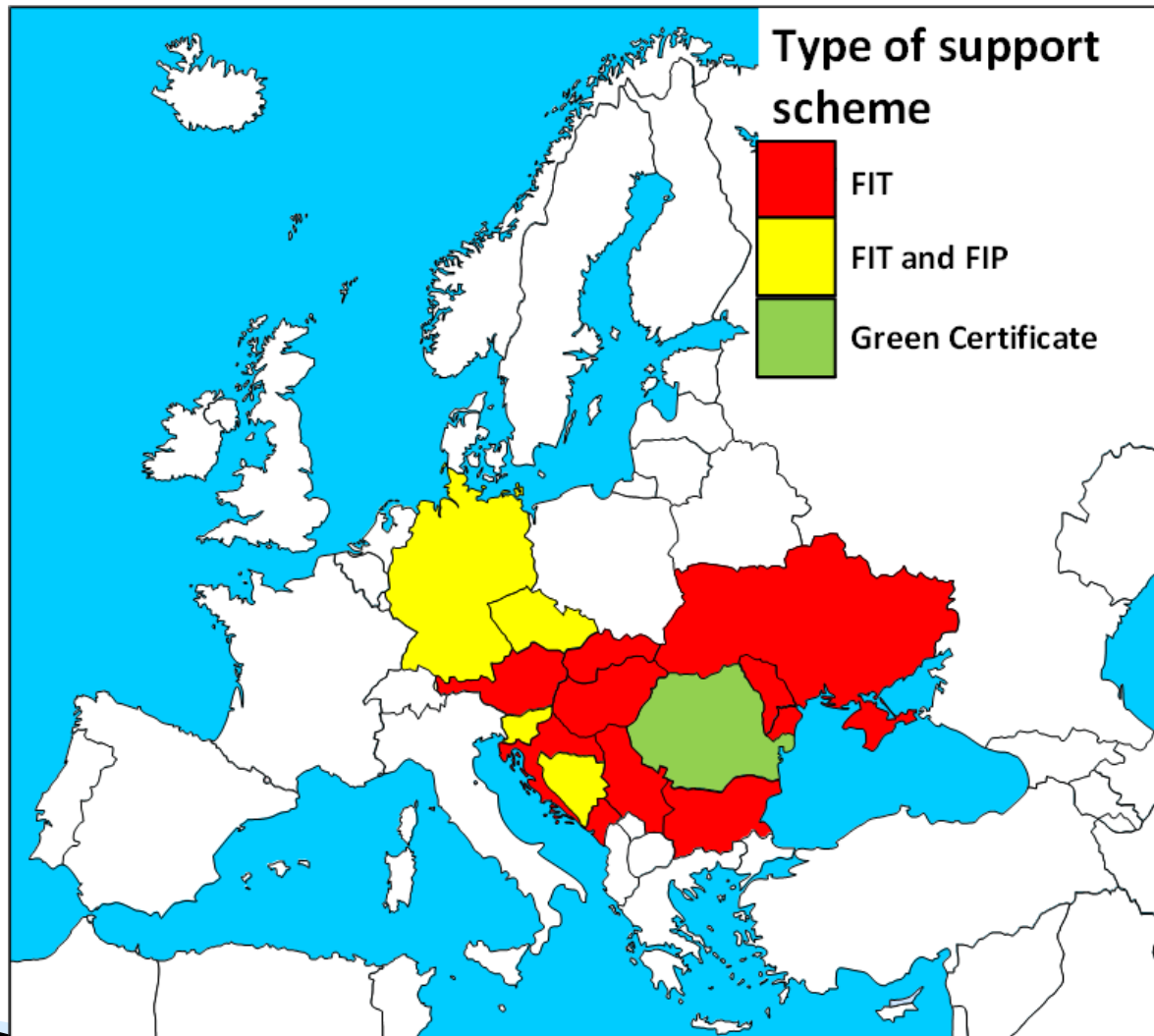
priority granted to RES-E plants → dispatching to the grid ↓	access rights to grid	<i>priority</i>	<i>guaranteed</i>	<i>other</i>
<i>priority</i>		AT, BG, CZ, HU, SK, SI, MD	RO, ME, UA, HR	RS
<i>non-priority</i>		BA		

Source: REKK RES-E Survey 2013.

Target – achievement



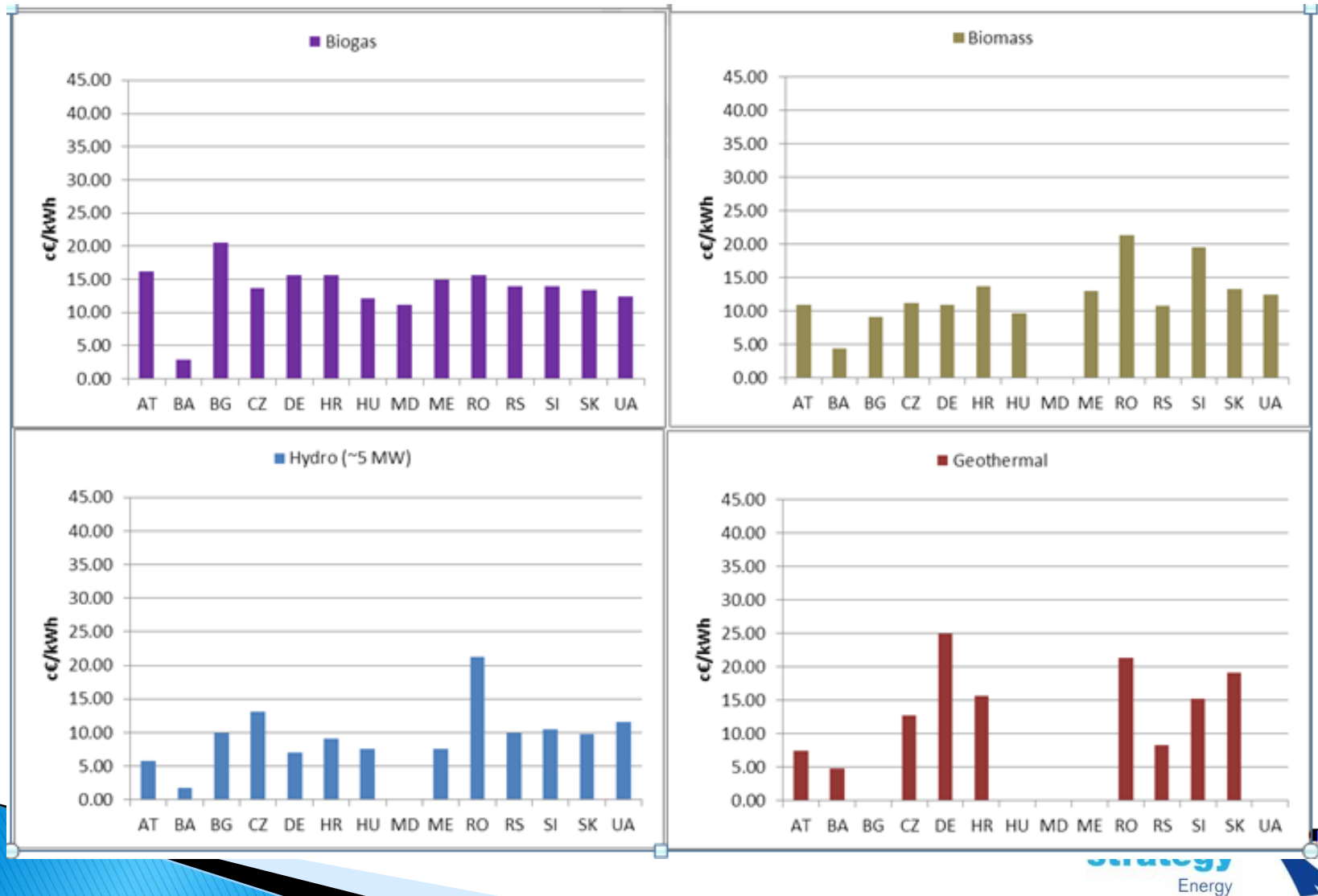
Type of Support Schemes in DR



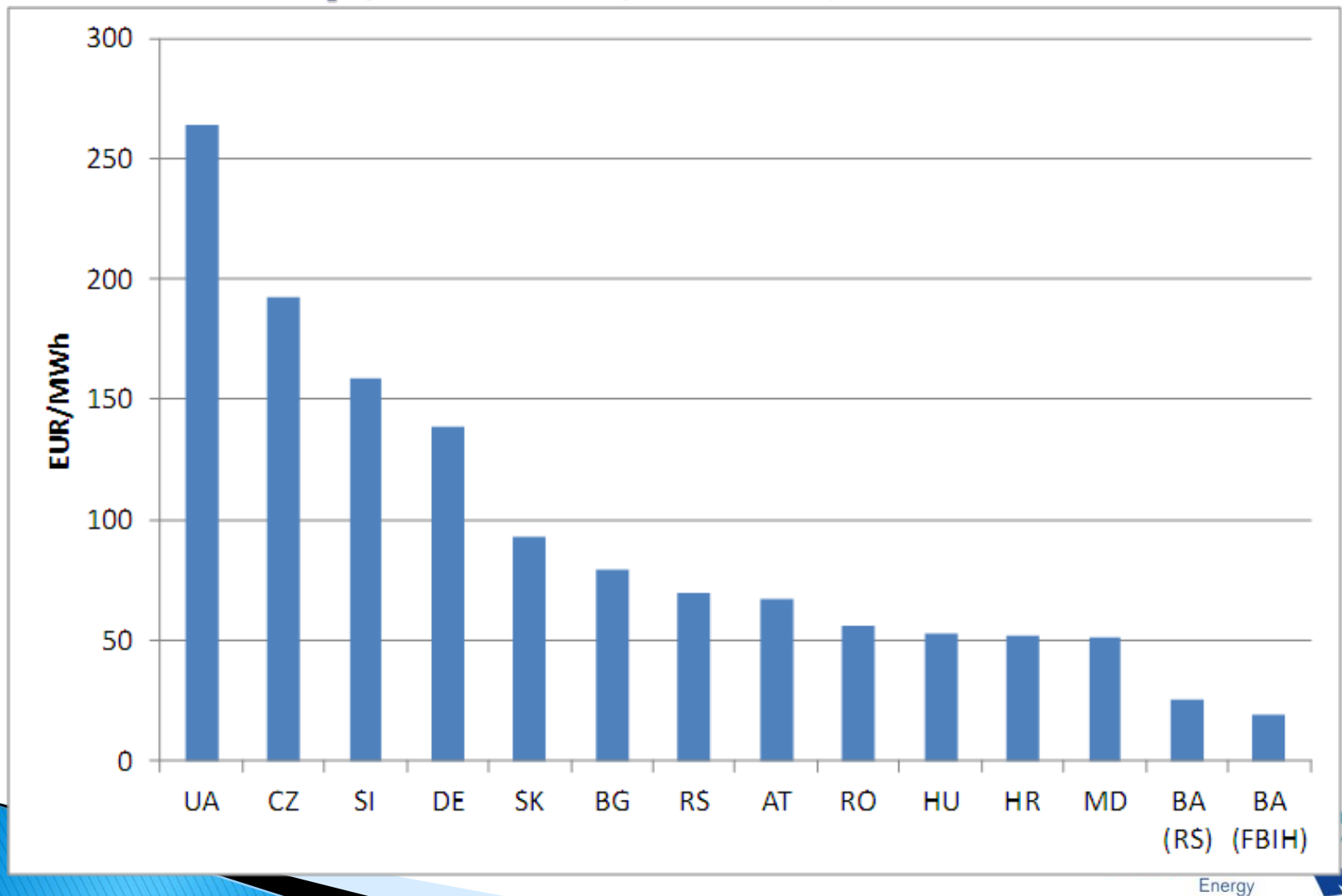
Calculated FIT levels 1,2012



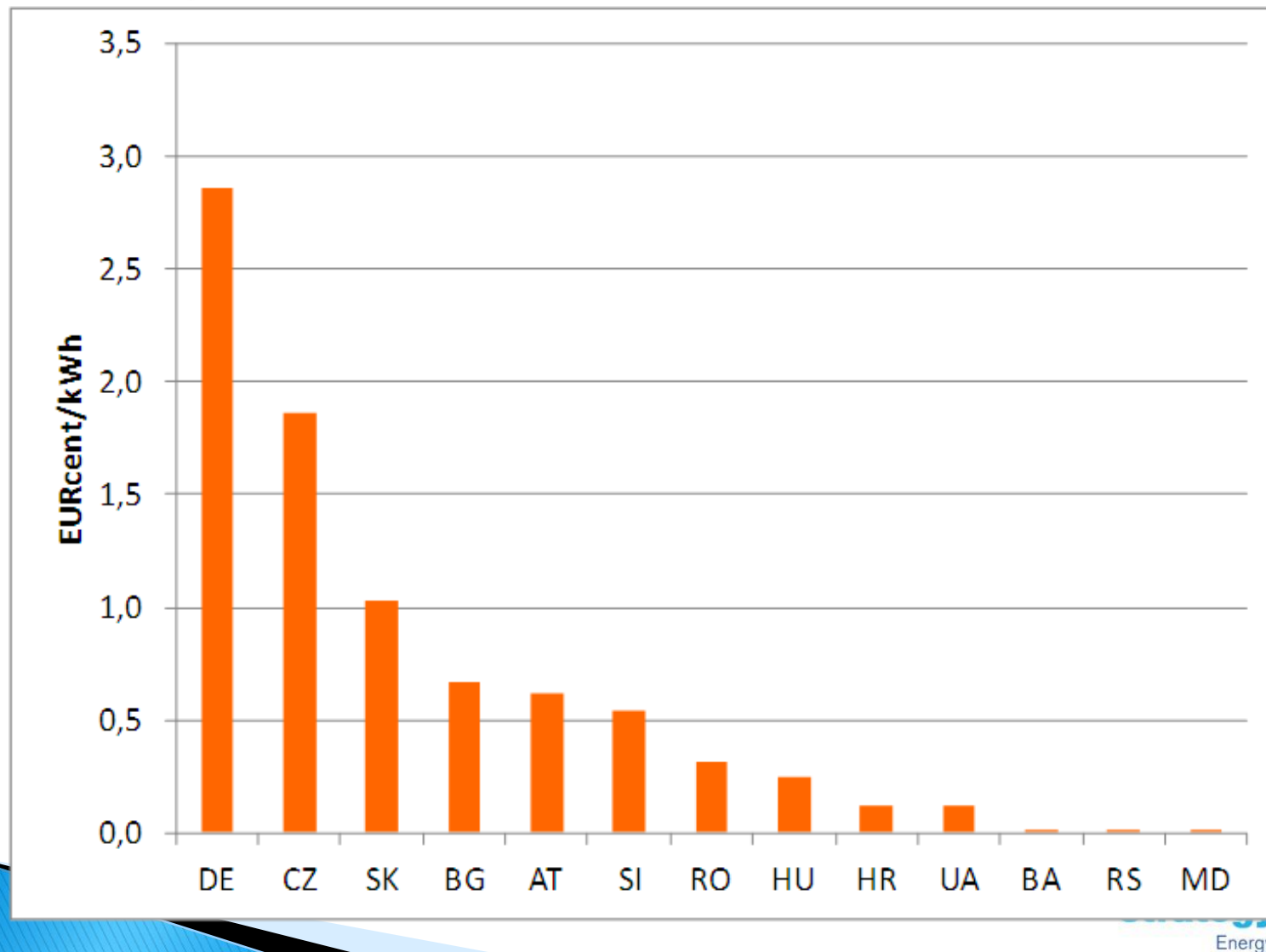
Calculated FIT levels 2 , 2012



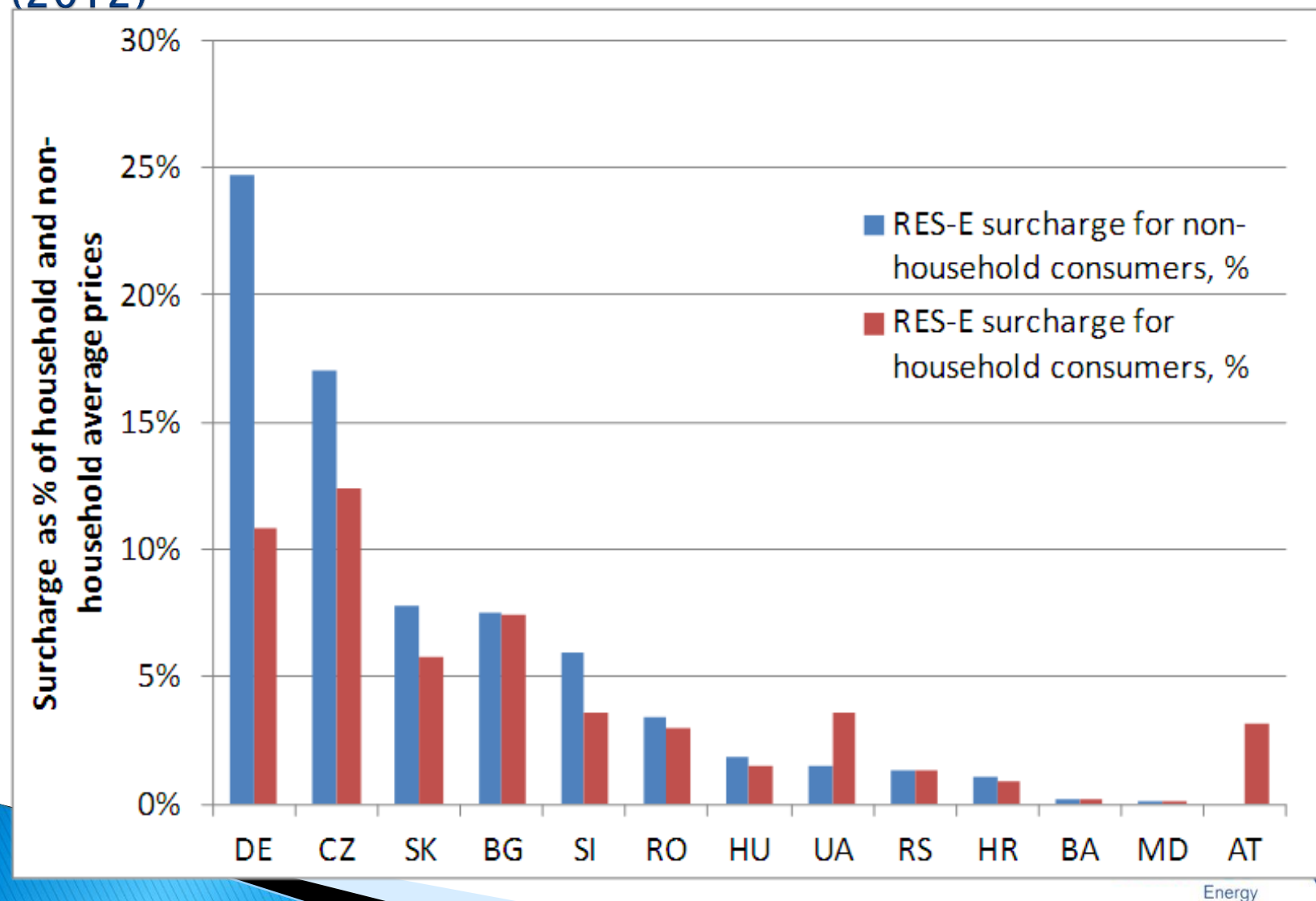
Unit support for renewable electricity, 2012, EUR/MWh



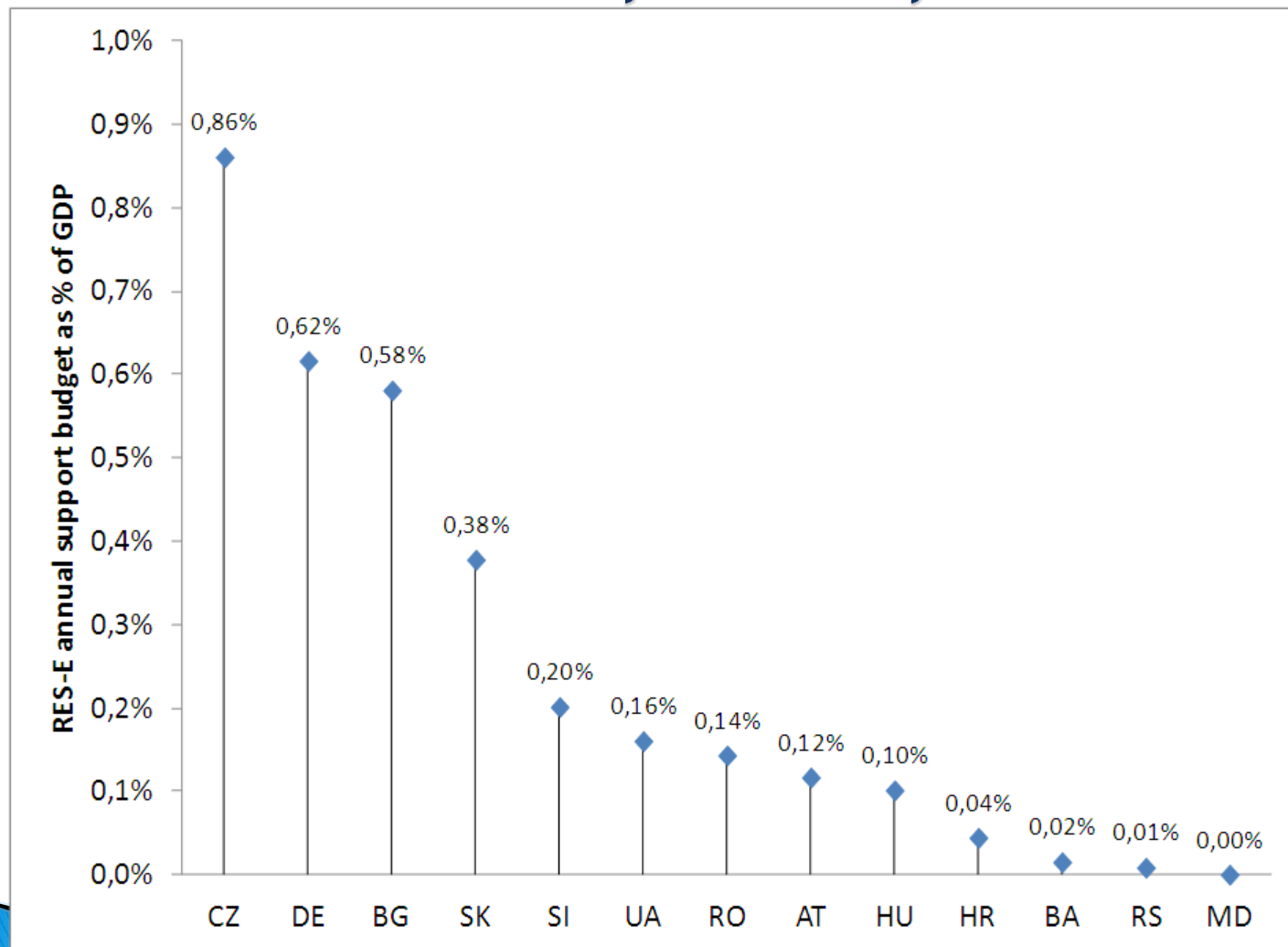
End-users' cost of renewable support per kWh of electricity consumed, 2012



Expenditure for renewable electricity support as percentage of end-use prices for household and non-household consumers, % (2012)



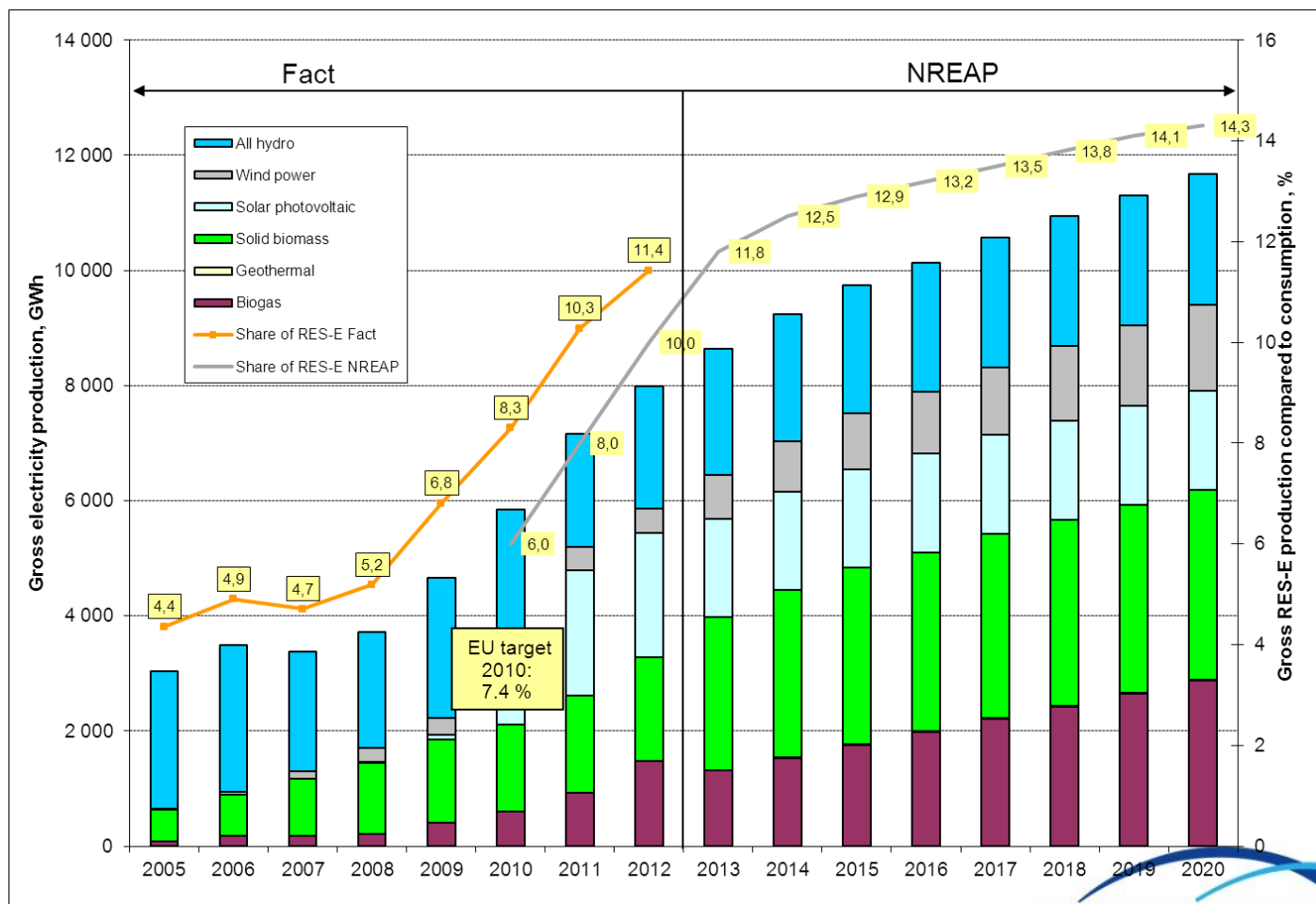
Annual RES-E support budget as percent of GDP, 2012, %



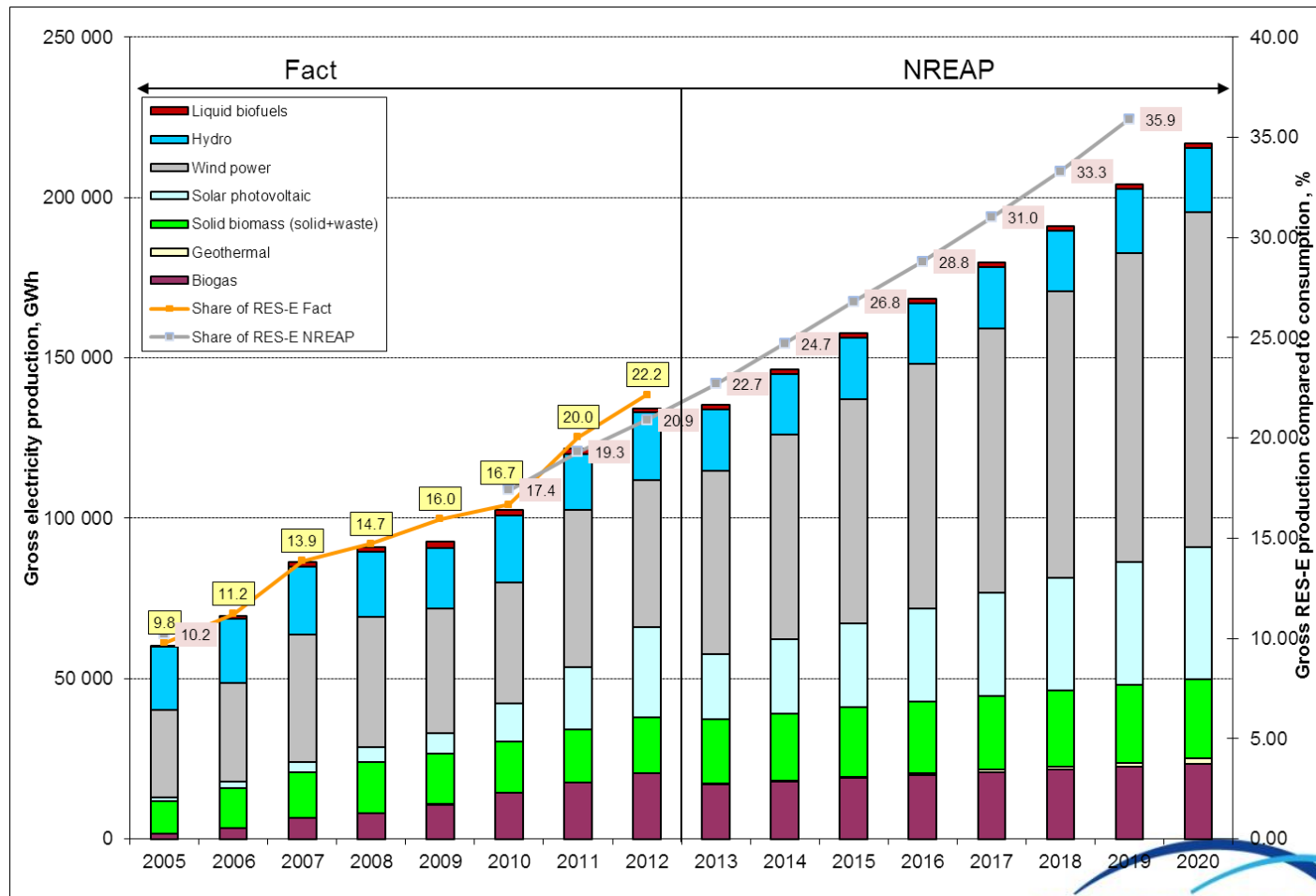
Country reports

- ▶ For all 14 DR countries;
- ▶ Following structure of assesment;
- ▶ Indispensable data source for policy makers;
- ▶ Covering recent data till 2012;

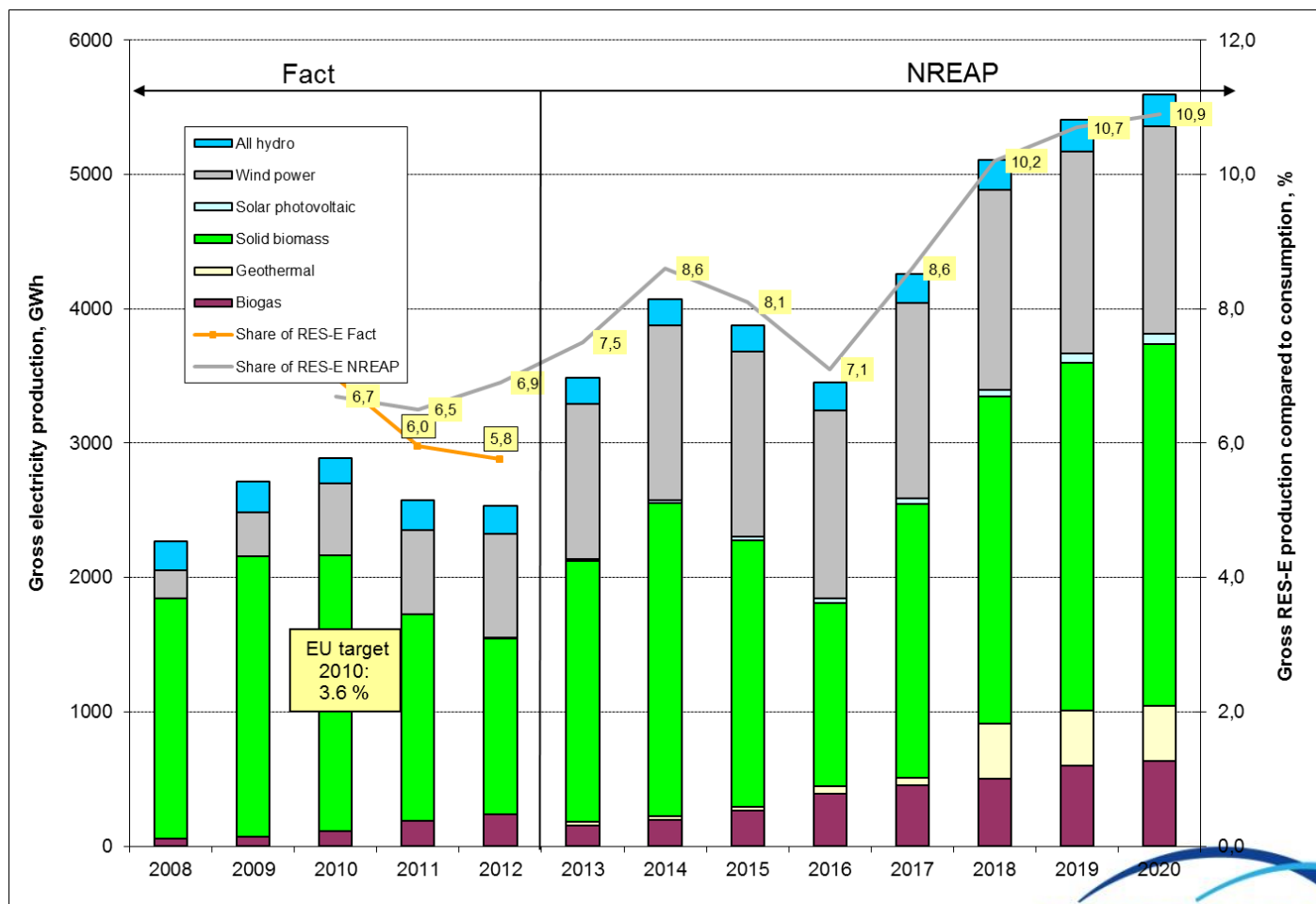
Country 1: Czech Republic



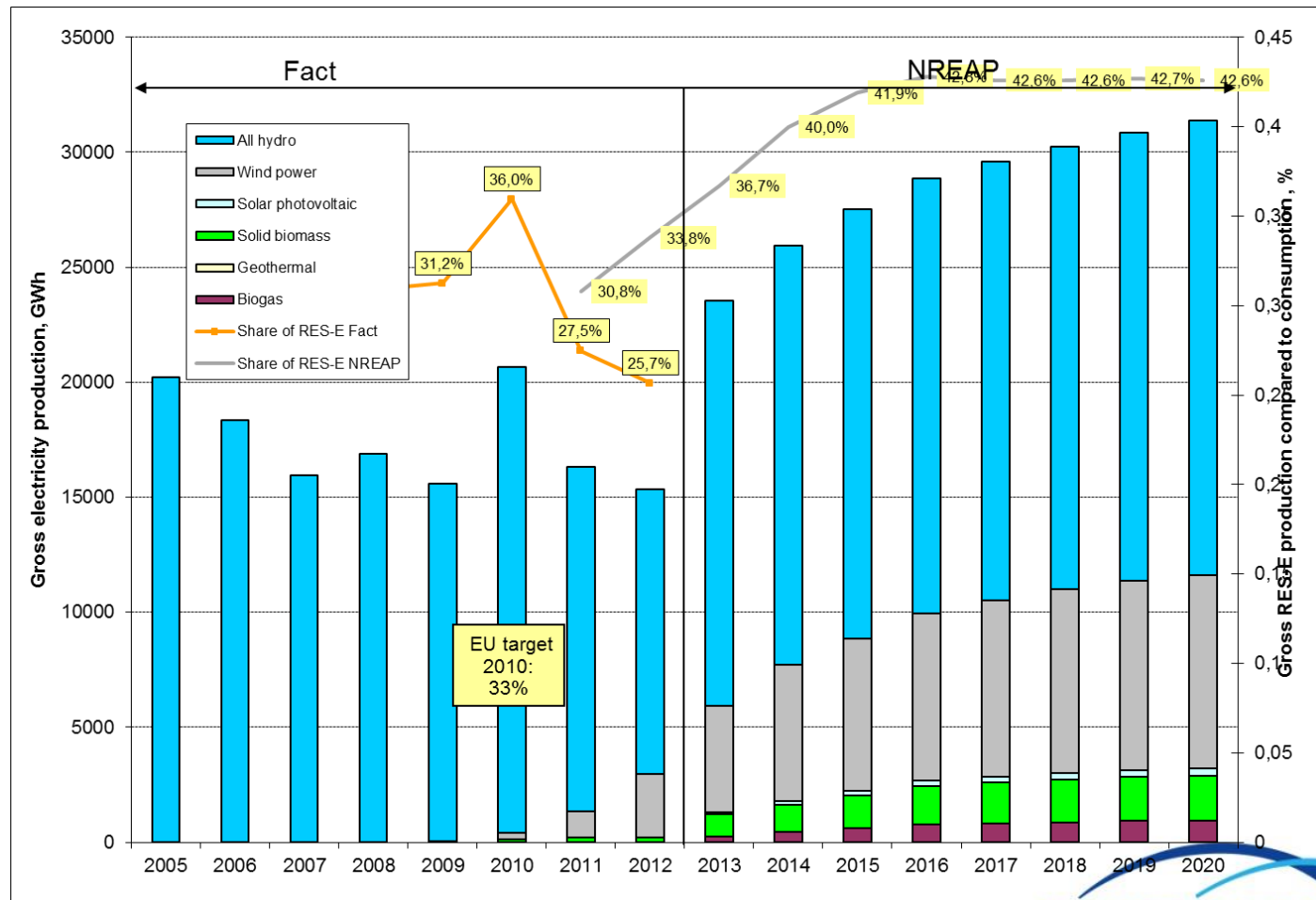
Country 2: Germany



Country 3: Hungary



Country 4: Romania



Key messages 1

- ▶ Numerous changes in the region's policy environment
- ▶ Significant investments have been made into new RES-E technologies
- ▶ Politically sensitive issue of the burden on electricity end-users caused by RES-E support policies in the Danube Region
- ▶ Sustainability of support is a major issue in the region

Key messages 2

- ▶ Most of the countries are well on track to meet their RES-E targets in 2020
- ▶ Accountability and stability are key to successful regulation of RES-E support instruments
- ▶ RES-E policymakers in the Danube Region still prefer to use feed-in tariffs (FIT) as their primary instrument choice
- ▶ Danube Region countries may be on the brink of major policy reforms to switch from FIT regimes to FIP schemes or other more market oriented ones



Thanks for your attention!