



# Tackling climate change and energy poverty from citizens' perspective

Dr.sc. Maja Božičević Vrhovčak  
Executive Director



## About DOOR

- Civil society organization – citizens' association
- Founded in 2003 in Zagreb
- Around 50 members, 15 volunteers, 9 employees

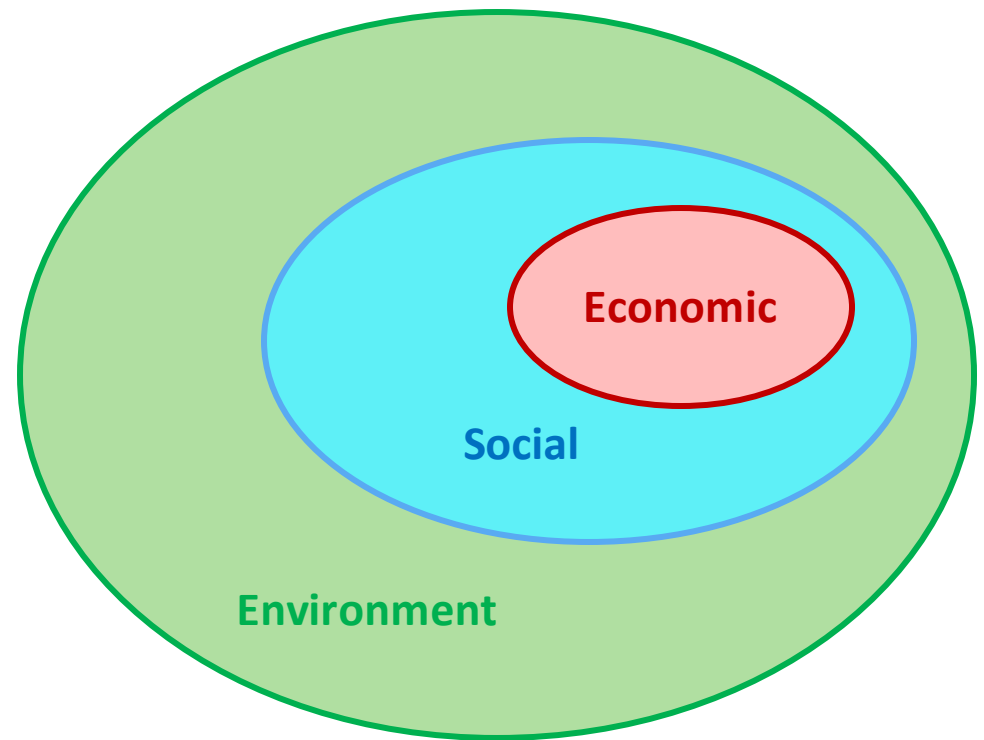
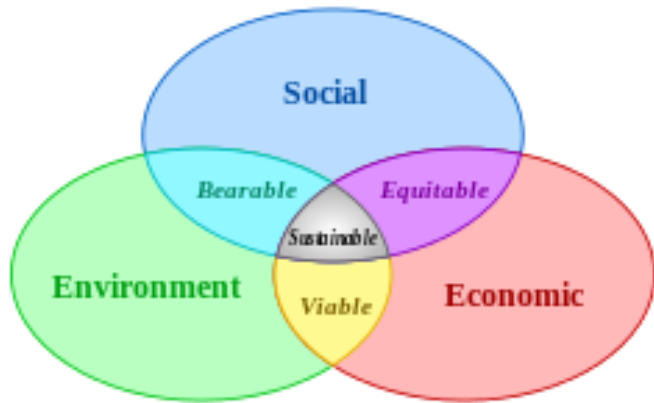
[www.door.hr](http://www.door.hr)

---

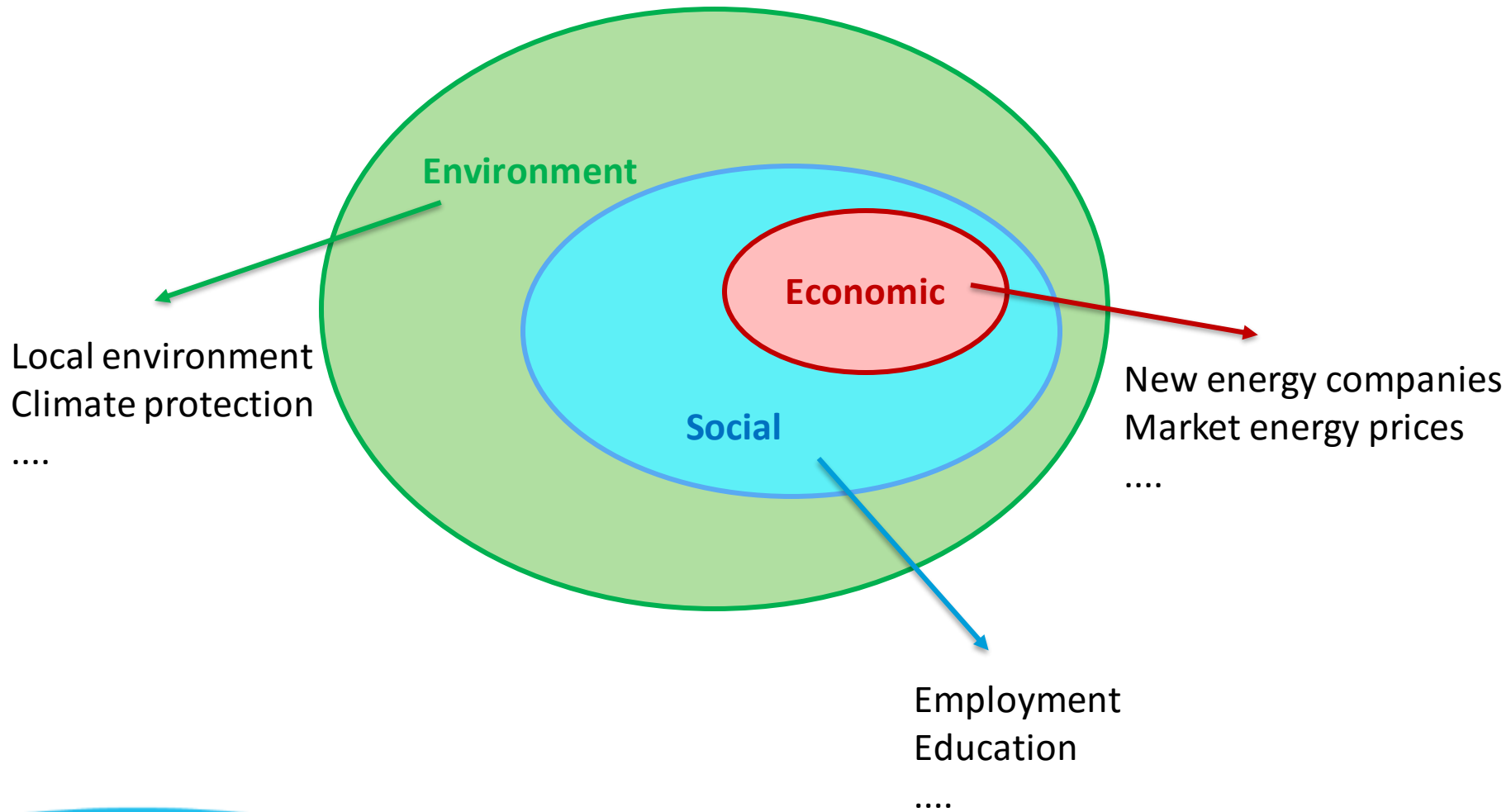
our topic: **sustainable energy development**



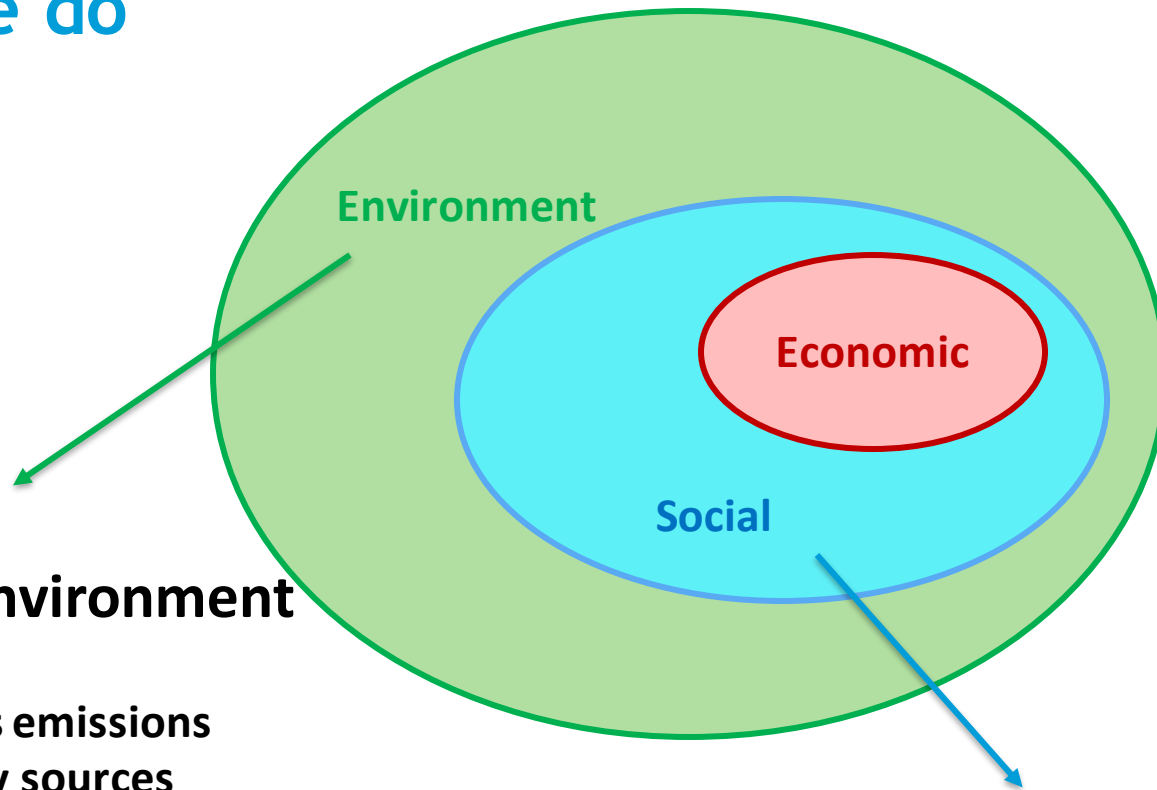
# Sustainable development



# Sustainable energy development



# What we do



## Energy and Environment

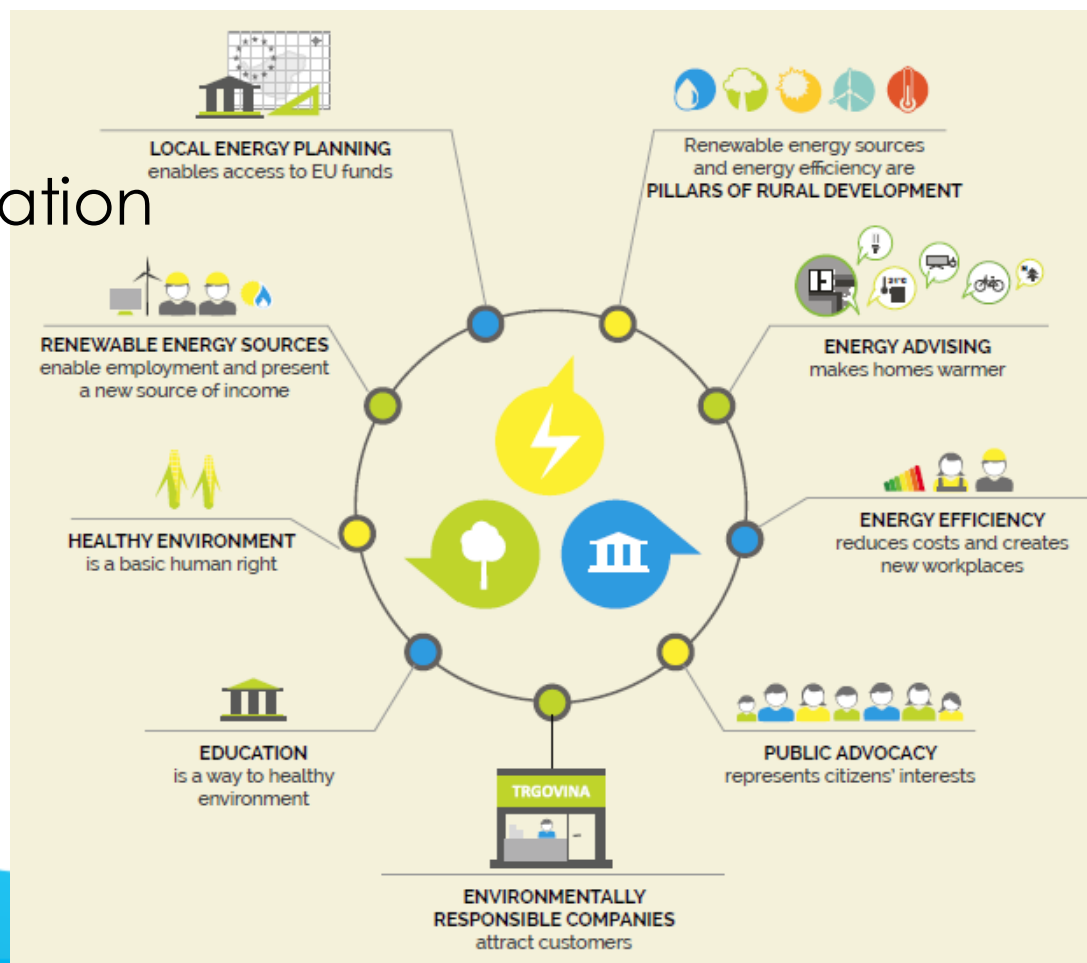
Greenhouse gases emissions  
Renewable energy sources  
Energy efficiency

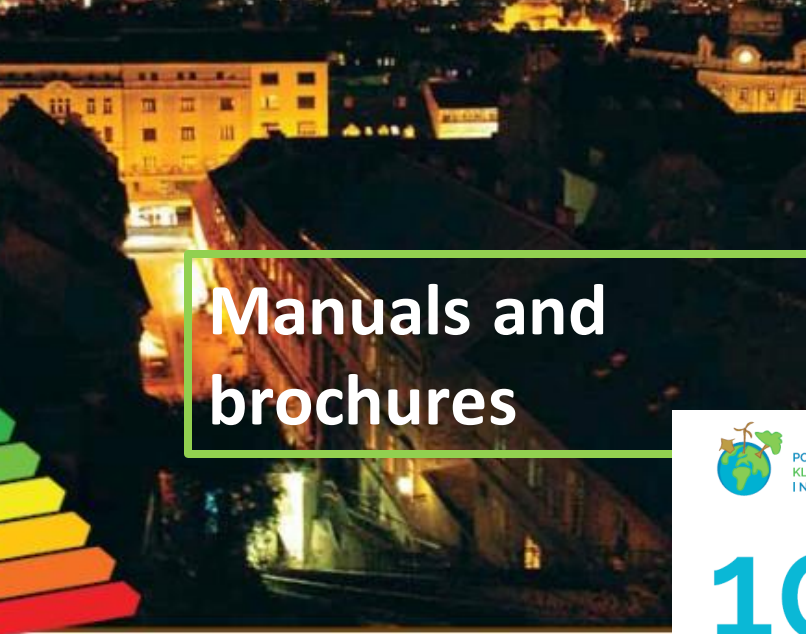
## Energy and Society

Energy poverty  
Local energy development  
Standardization  
Climate change adaptation

# How we do it

- Research and analysis
- Education and information dissemination
- Advocating





Manuals and brochures

 CENEP

SUDELOVANJE GRAĐANA U PLANIRANJU POBOLJŠANJA ENERGETSKE UČINKOVITOSTI  
CITIZEN PARTICIPATION IN ENERGY EFFICIENCY ACTION PLANNING

**KAKO SE UČINKOVITO UKLJUČITI?**

PRIRUČNIK ZA SUDELOVANJE GRAĐANA U POKRETANJU, DONOŠENJU, PROVEDBI I PRAČENJU MERA ZA POKREĆENJE ENERGETSKE UČINKOVITOSTI

 CENEP

SUDELOVANJE GRAĐANA U PLANIRANJU POBOLJŠANJA ENERGETSKE UČINKOVITOSTI

Cilj projekta je podržati i razvijati razne inicijative i formalne organizacije kojima bi se povećala uključenost građana u energetske projekte i poboljšala energetska učinkovitost.

 POVEĆANJE RAZUMIJEVANJA KLIMATSKO-ENERGETSKE POLITIKE EU I NJENOG UTJECAJA NA SVAKODNEVNI ŽIVOT

**10 PITANJA**  
O EU FONDovima  
NAMIJENJENIM  
ZAŠTITI KLIME  
I ENERGETICI





 ENCRU


**GOSPODARENJE ENERGIJOM**  
Primjeri dobre prakse

**Znanjem do ugodnijeg stanovanja**

Kako smanjiti potrošnju energije u kućanstvu?

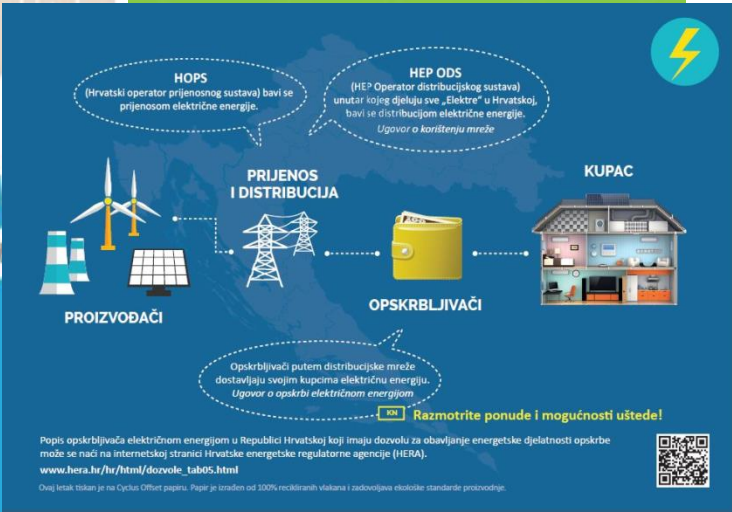


Znanjem do toplog doma



**ZAŠTITA I PROMICANJE OBNOVLJIVE ENERGIJE**

javno zagovaranje obnovljivih izvora energije





# Study trips



Workshops, seminars, conferences,  
webinars, round tables



# Recommendations

## Trenutne cijene i radna mjesta ili zajednička budućnost?

nemogući izbor u Hrvatskoj 2013. GODINE

### ISTRAŽIVAČKI IZVJEŠTAJ U SKLOPU PROJEKTA:

Povećanje razumijevanja klimatsko-energetske politike EU i njenog utjecaja na svakodnevni život



## PRIJEDLOG MJERA ZA POBOLJŠANJE ENERGETSKE UČINKOVITOSTI U KUĆANSTVIMA ZA RAZDOBLJE 2014.-2016.

Konačna verzija. Siječanj 2013.

## Research and analysis



### POBJEDNICI I GUBITNICI

Kome koristi korupcija na visokim razinama odlučivanja u energetskom sektoru jugoistočne Europe?



### ENERGETSKA UČINKOVITOST – KADA? SADA!

Pokreni se sada za toplije domove, nova radna mjesta i čistiji zrak!



## ENERGETSKO SIROMAŠTVO

Sadržaj ovog dokumenta isključivo je odgovornost projektnih partnera

### ISTRAŽIVAČKI IZVJEŠTAJ O ENERGETSKOM SIROMAŠTVU U PETRINJI

Autori:

Dr.sc. Branko Ančić

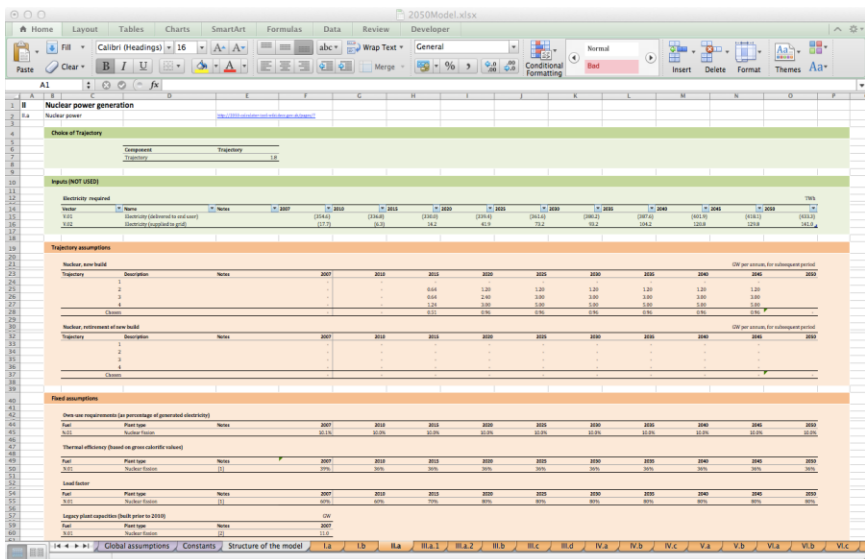
Dr.sc. Mladen Domazet

Katarina Grbavac, mag.soc.

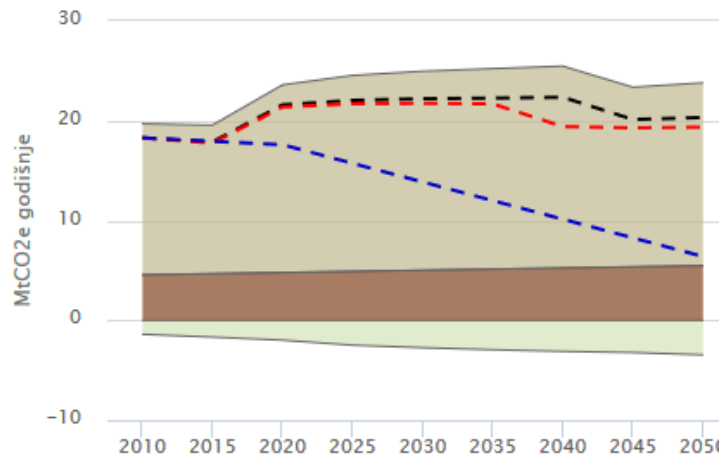
Urednica:

Slavica Robić, MSc

# Climate change mitigation



## Emisije stakleničkih plinova



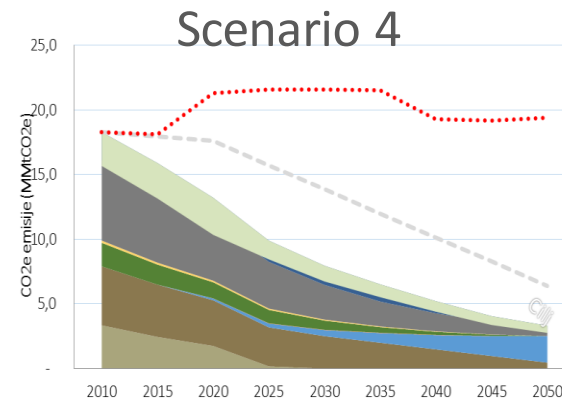
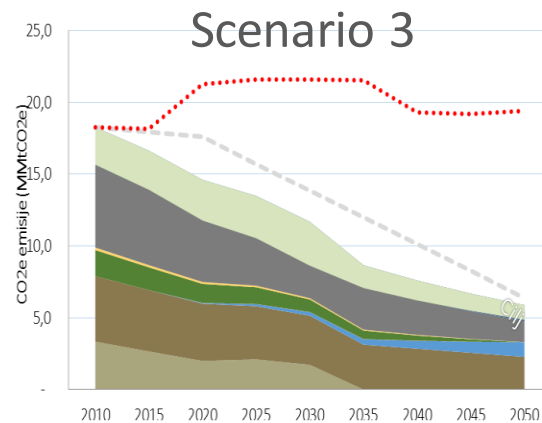
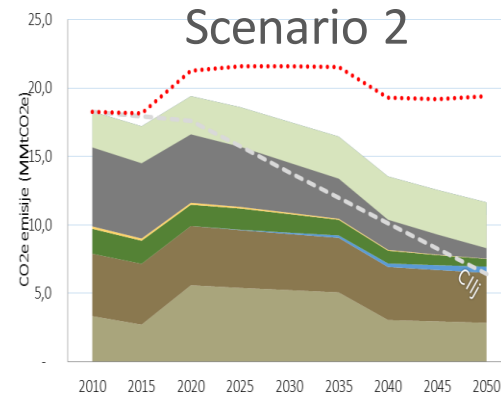
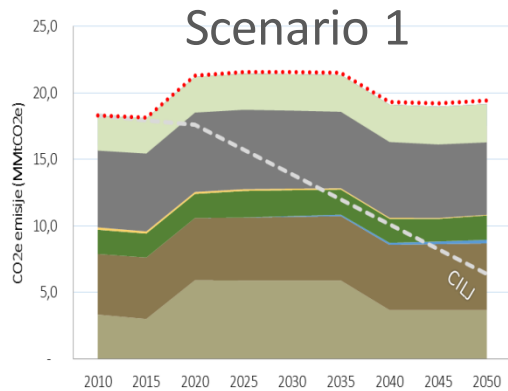
- Bioenergetski krediti
- Industrijski procesi i otpala
- Poljoprivreda, otpad i ostalo
- Izgaranje goriva
- CCS
- Ukupni neto iznos ne uključujući međunarodno zrakoplovstvo
- Referenca
- EU Target (vs. 1990)



## Ekonomija ponude

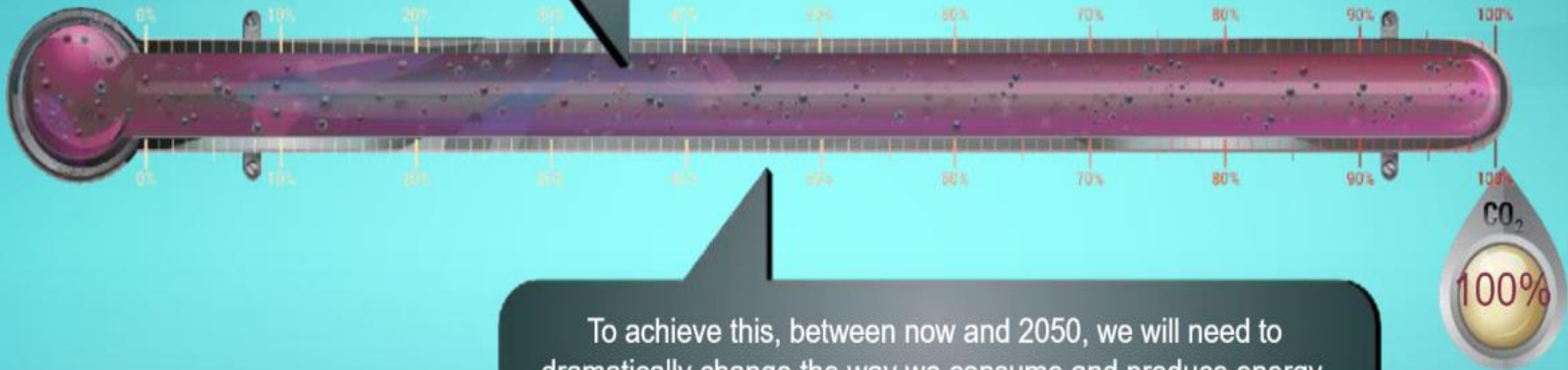
Kretanja cijena energije	1	2	3	4
Vjeter na kopnu	1	2	3	4
Hydroelektrična energija - velika	1	2	3	4
Hydroelektrična energija - mala	1	2	3	4
Geotermalna električna energija	1	2	3	4

# Total CO<sub>2e</sub> emissions until 2050



Next

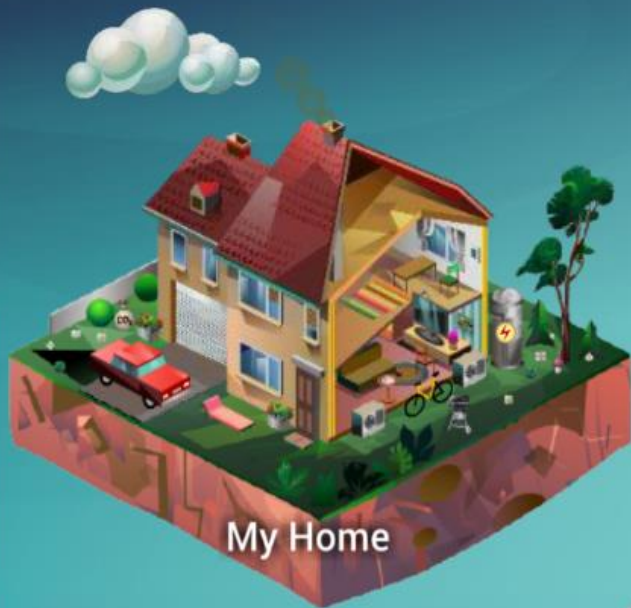
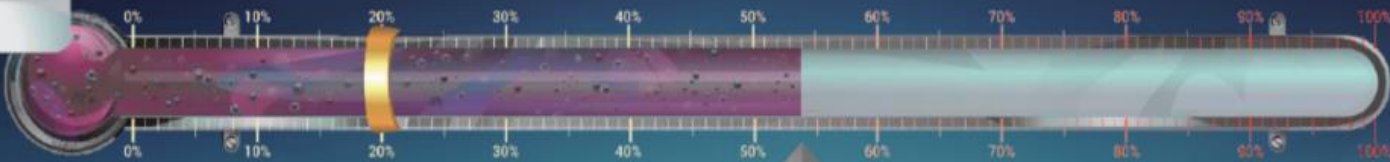
In order to avoid the most dangerous impacts of global climate change scientists have proposed that we need to reduce our greenhouse gas emissions by 80% by 2050, from a 1990 base.



To achieve this, between now and 2050, we will need to dramatically change the way we consume and produce energy. The challenge is to see if you can reduce our emissions by 80%, which will require some skill and thought. It is not easy so solutions that are +/- 10% of that target could be submitted.  
Good luck!







My Home

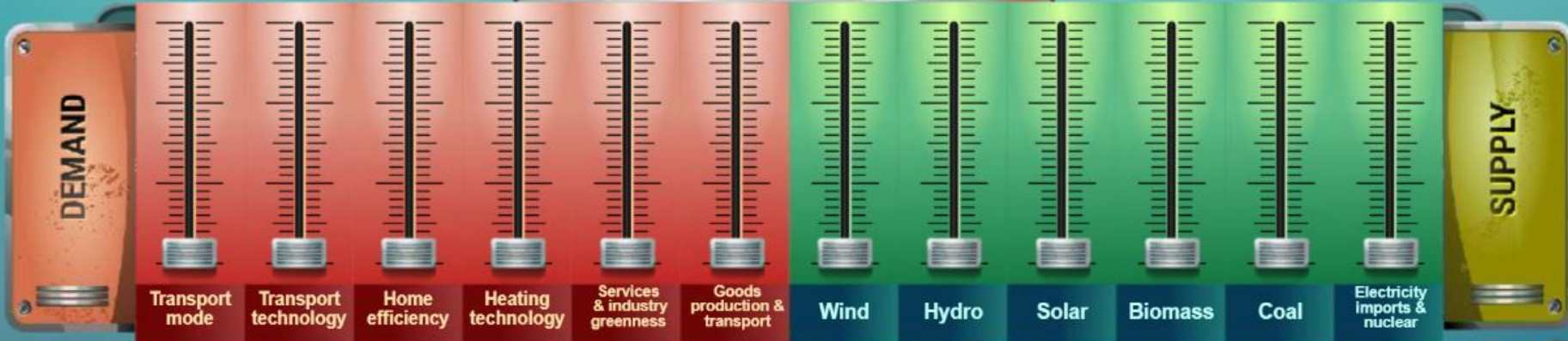


My City



My Country

My energy security indicator



? Slider information





# Energy poverty

- Poverty is lack of access to resources and lack of opportunities
  - 896 million of people in extreme poverty vs. 2 billion energy poor
- Energy poverty manifests either as a complete lack of access to modern energy sources or as inability to bear energy-related costs which are necessary to provide living conditions acceptable in terms of health care, society and culture
- Consequences:
  - Degraded physical and mental health
  - Decreased opportunities to participate in community activities
  - Forced to choose between food and energy comfort
- **New EU member states >30% of households**



# Why Energy Poverty Matters

- Governments have a duty, under *The universal declaration of human rights 1948 (Article 25)*, to ensure that:

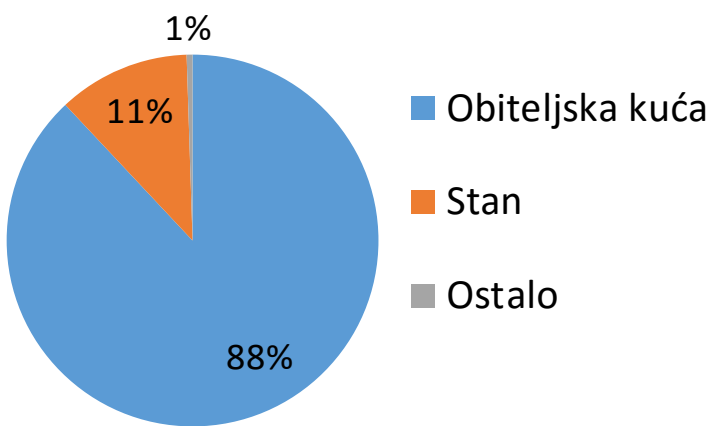
(1) Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.



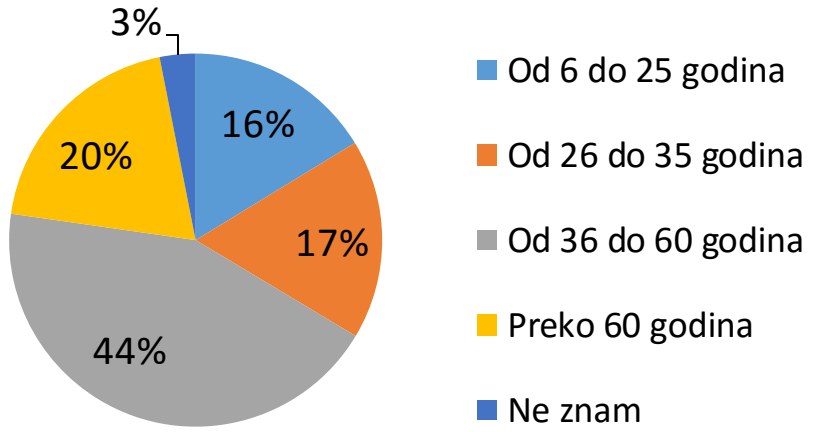
# Field work: Sisačko-moslavačka county

(N=394 households)

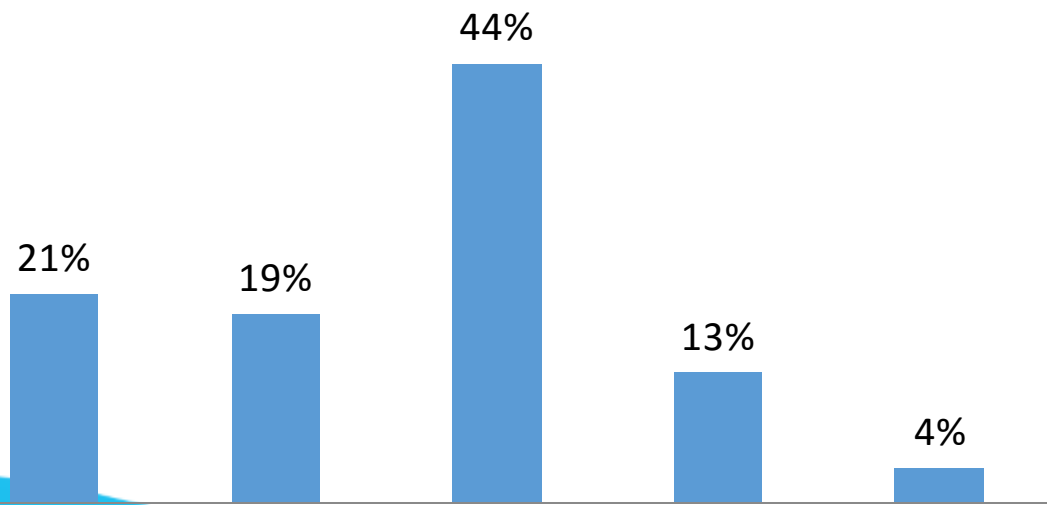
### Household type



### Household age

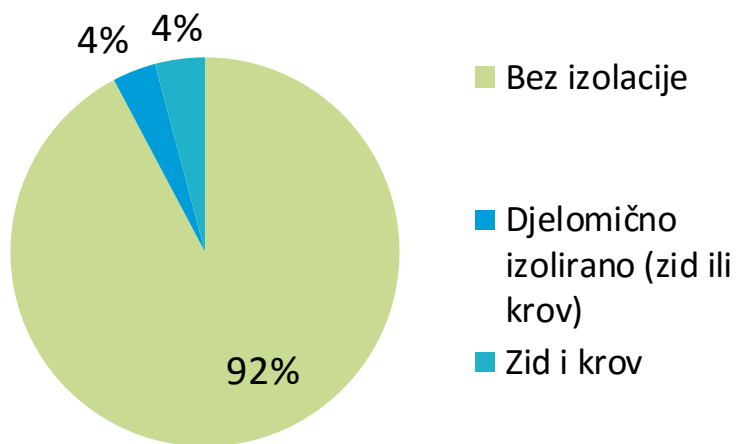


### Number of residents

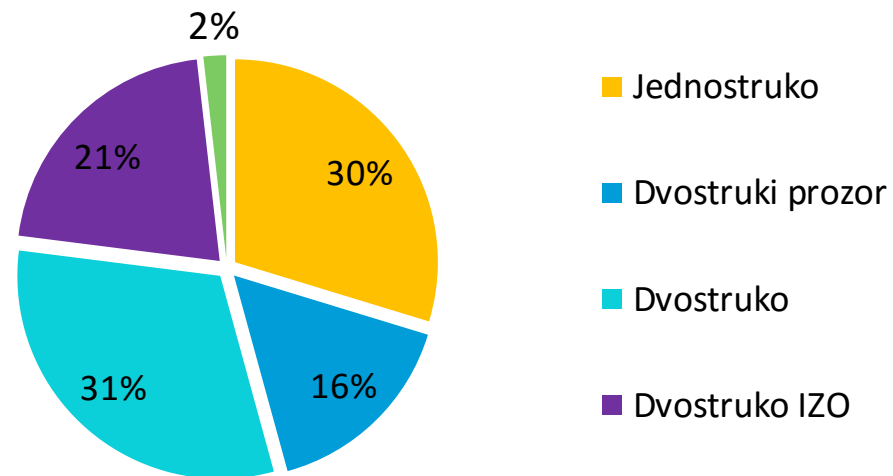


# Field work: Sisačko-moslavačka county

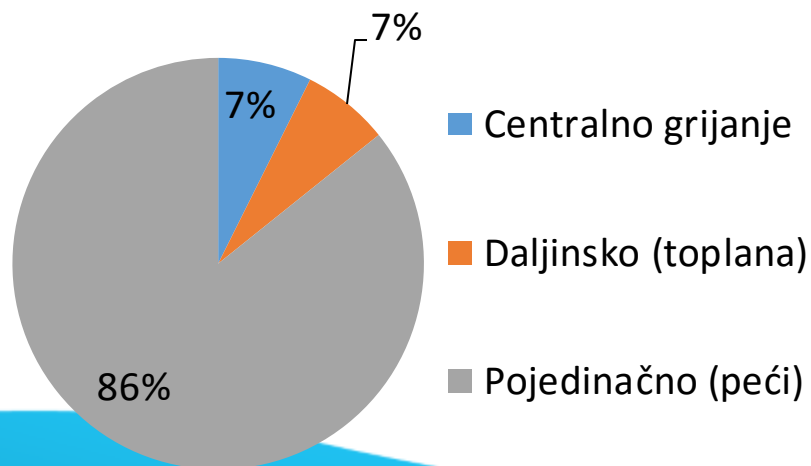
## Isolation



## Glazing



## Heating type





## Field work: Sisačko-moslavačka county

- Average electricity consumption = 4.475 kWh/yr
  - National average(2012.) = 3.766 kWh/yr, SMC average 3.551 kWh/yr
  - 11 without electricity access (3 via neighbourghs)
- Average heat consumption = 25.362 kWh/god
  - National average(2012.) = 10.889 kWh/god, SMC average 23.209 kWh/god za SMŽ





# Field work: Sisačko-moslavačka county

REACH	ZDTD
LED žarulje	LED žarulje
Refleksijske folije za iza radijatora	Refleksijske folije za iza radijatora
Termometri	Termometri
Gumene trake za brtvljenje prozora	Gumene trake za brtvljenje prozora
Perlatori	Perlatori
Vrijednost pojedinačnog paketa: 230 HRK	Produžni kablovi s prekidačem
	Uklopni satovi za bojlere
	Četkasta brtvila za vrata
	Vrijednost pojedinačnog paketa: 700HRK

- Total savings estimation: more than 200.000 kWh ie around 700 kWh per household annually
- More than 18 tons CO<sub>2</sub> less annually
- Around 400 kuna less annual energy costs



# How to get involved

- Follow us at web page, FB, Twitter
  - We are recrouting
    - new training
- Monday the 18th!



## Pridruži se borbi protiv energetskog siromaštva!

Uvodno predavanje o energetskom siromaštvu

Terenski i timski rad!

Nova praktična znanja i vještine!

Mogućnost zarade preko SC-a!

Nakon predavanja među prijavljenima odabrat će se 5-10 polaznika kojima će biti pružena:

- mogućnost sudjelovanja na treningu i terenskom radu
- mogućnost honorarne zarade (u veljači 2018.)

Datum: 18.12.2017. (ponedjeljak)  
Vrijeme: 12:00 sati  
Mjesto: Trg kralja Petra Krešimira IV 2 (učionica 226), Zagreb

Prijave šaljite na [ana.lesija@door.hr](mailto:ana.lesija@door.hr) do 17.12. u 19h.  
Prijava mora sadržavati motivacijsko pismo i kratki životopis.

Više o DOOR-u potražite na Facebooku ili na [www.door.hr](http://www.door.hr).



# Thank you for your attention!

[maja.bozicevic-vrhovcak@door.hr](mailto:maja.bozicevic-vrhovcak@door.hr)

[www.door.hr](http://www.door.hr)

[www.facebook.com/DOOR.hr](https://www.facebook.com/DOOR.hr)

