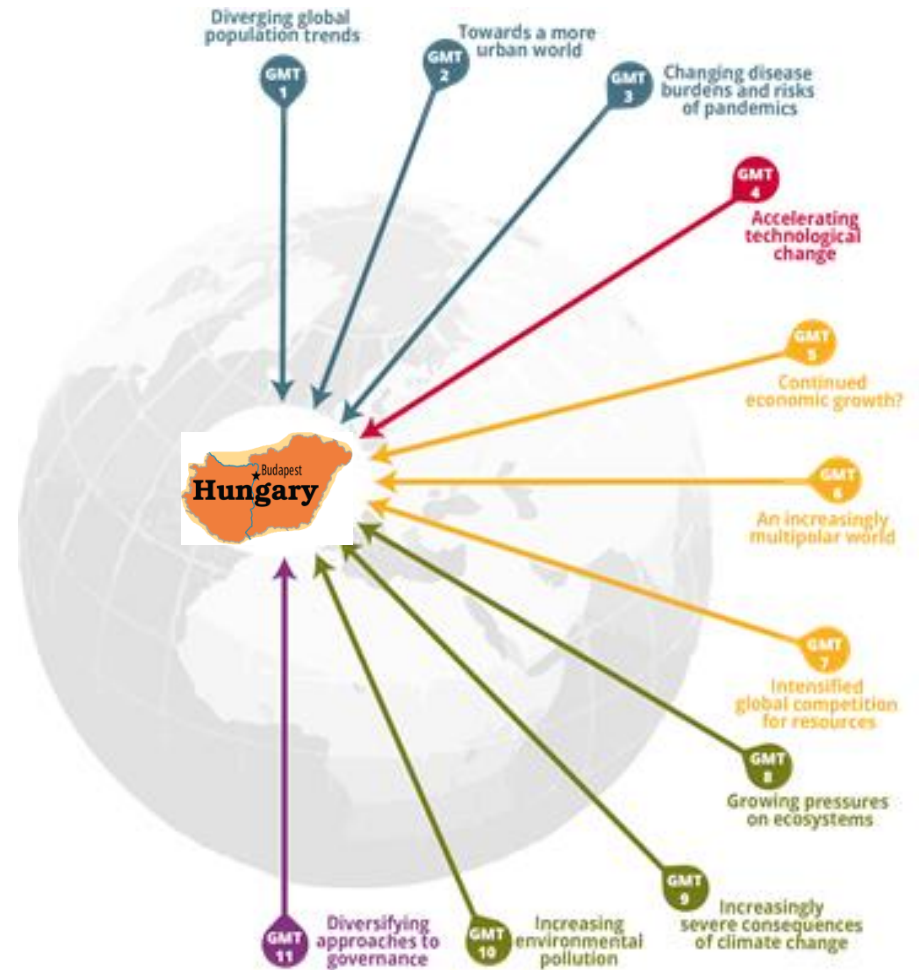




FÖLDMŰVELÉSÜGYI
MINISZTERIUM

Global megatrend's environmental impacts in Hungary

29 June 2016



1. WHAT ARE THE MOST IMPORTANT GLOBAL MEGATRENDS AND THEIR EFFECTS FOR HUNGARY?

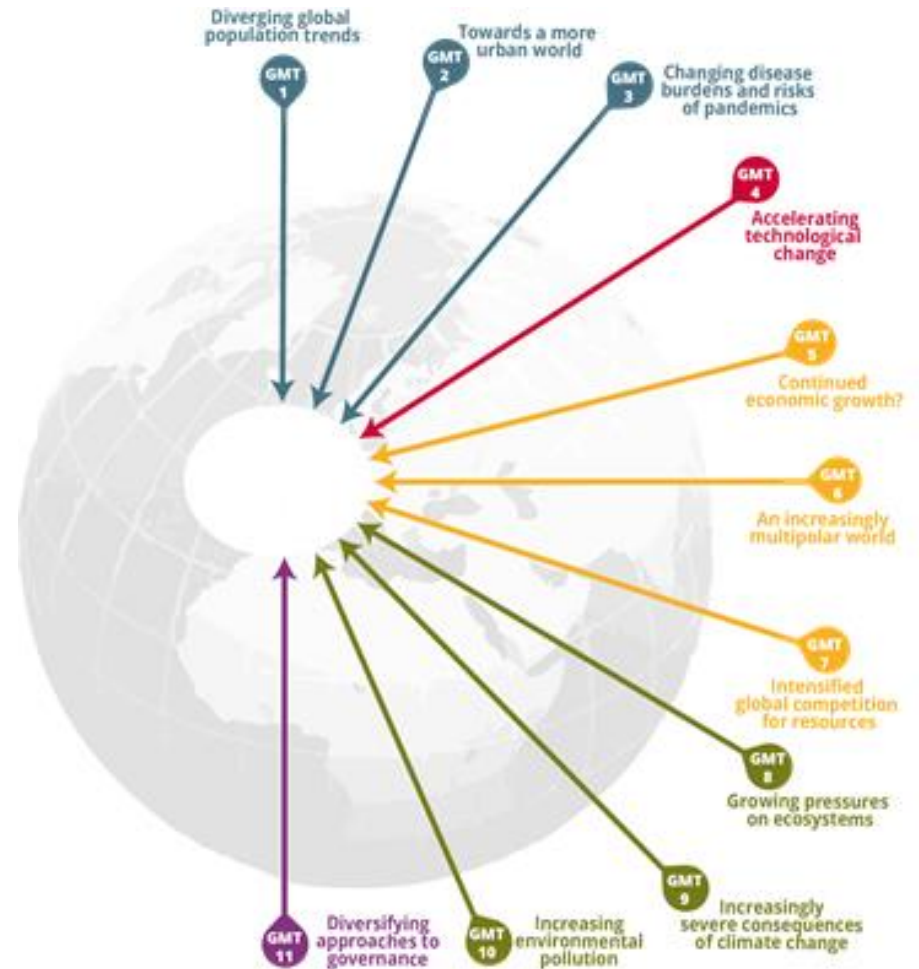
2. HOW ARE THEY COVERED BY POLICIES (STRATEGIES, CONCEPTS, ACTION PLANS, LAWS, REPORTS, DATA, ETC.)?

NOT A TRADITIONAL WORKFLOW...

„COPRODUCTION OF KNOWLEDGE”

Global megatrends...

...and further megatrends



Further megatrends:

Digital society and cyber-generation

- „Z” generation: children and students now, but will be decision makers tomorrow.
- It is unimaginable to live without the use of **digital communication tools**. They gain more and more information, and they process them differently; they think differently than the older generations.
- Most of them uses **internet** for having news.
- They prefer **illustrations and pictures** to texts. They require interactivity, variety, the use of technical tools.
- Intensity of their attention fails after **3-5 minutes** in average.
- Teenagers sit 8 hours in front of screen in average, thus the **perception of the reality** is not direct but via the screen. This idealistic world explains the high popularity of natural photos and carefully made snapshots – via the comfortable screens.



Further megatrends:

Increasing sensibility on environment

- Everyone deals with environment, even the Pope. His „green” encyclical has been introduced in Vatican on 18th of June 2015. ***Laudato Si*** and its messages became part of common talk.
- Only in Hungary it motivated **7 conferences** during the last autumn. Environmental interest is not new for the churches, but Pope Francis’ *Laudato Si* gave great impetus for their cooperation. Just one example: until November 2015 in 70 church yards more than **2000 trees** have been planted.



Metropolitan John of Pergamon and Cardinal Turkson introduce the encyclical. Photo: Vatican Press Service

Further megatrends:

Increasing sensibility on environment

- We see urban **gardening**, green balconies, „do-together” parks, green roofs, vertical gardens, open air gyms, and even Green Highline (New York, Manhattan, USA), Vertical Forest (Milan, Italy)...
- Mr Géza Bálint, a senior gardener (96!) in Hungary has 341 104 fans via Facebook.
- EUROSTAT: 96% of Hungarians find environment important, but 77% of them finds herself/himself not well informed enough.
- An NGO for enhancing school gardens has been founded in March 2015 and by the end of that year it had 77 member schools.



Berlin, Germany



Singapore, Parkroyal Hotel



California, USA



Portland, USA



Amsterdam, The Netherlands

BY MIKLÓS MARTON

Further megatrends:

Increasing sensibility on environment

- Popularity of greater NGOs (Greenpeace, Earth Guardians etc.) continuously rise.
- IKEA yearly Hungarian catalogue 2015 had 102 photos with plants, and some full pages are about gardening.
- IKEA CEO stated: „Less and less of IKEA's younger consumers have a driving license”, Agnefjall said. „They prefer to come to our stores via public means etc. And that means we need to come closer to the people and come closer to the public transportation”, he



By MIKLÓS MARTON

Further megatrends:

Increasing sensibility on environment

- **Climate March (2015)** had 175+ Countries with marches, 2300+ marches worldwide, **785,000** people marching (estimated).
- One of the greatest strategic planners of our age, Mr Michael R. Bloomberg, founder, CEO and owner of [Bloomberg L.P.](https://www.bloomberg.com/) announced *Climate Summit for Local Leaders*. At the high level meeting on December 4, 2015, at the City Hall of Paris the C40 initiation has been formed.
- The NGO Arena at Paris Climate Negotiations has been named “**Climate Generation Arenas**” (with *120 exhibition stands, 20 interactive education exhibitions, and almost 400 (!) conferences and movie presentations*).



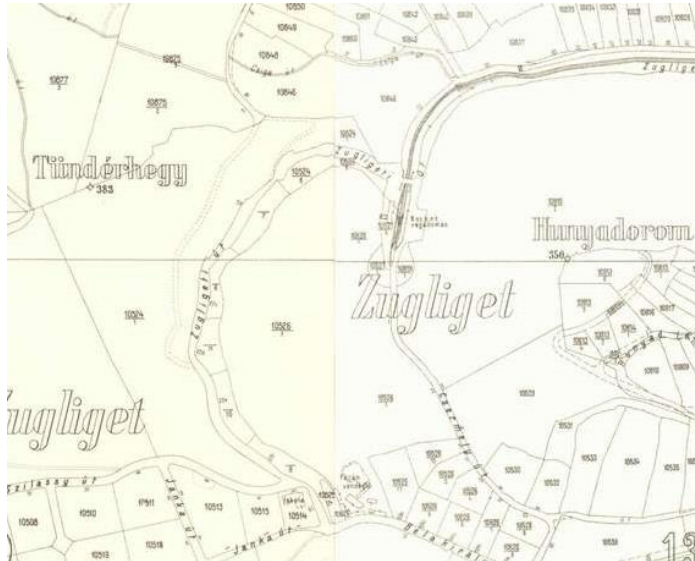
Global megatrend impacts:

List of top 13

1. **Decreasing of Natural habitats (14 points)**
2. **Increasing number of extreme weather situations (flood, drought) (12 points)**
3. **Health effects of climate change (premature deaths, new contagious diseases) (9 points)**
4. **Increase of pollution, emission (9 points)**
5. **Increasing demand for water – decreasing amount of base water (9 points)**
6. **Negative effects of free trade agreements (7 points)**
7. **Transformation of natural symbiosis's (native species may rolled back, alien species appear) (6 points)**
8. **Hungary may became destination for migrants (6 points)**
9. **Quality of ecosystem services may decrease (5 points)**
10. **Waste generation (4 points)**
11. **+Use of alternative energies may gain role (3 points)**
12. **Quality and quantity degradation of soil (3 points)**
13. **+Optimization of material use efficiency may gain greater role (due to scarce resources) (3 points)**

GMT impacts

- **Decreasing of natural habitats** (14 points)
- **Transformation of natural symbiosis's (native species may rolled back, alien species appear** (6points)
- **Quality of ecosystem services may decrease** (5 points)



Térkép 1937-ből



Jelenlegi Googlemaps térkép

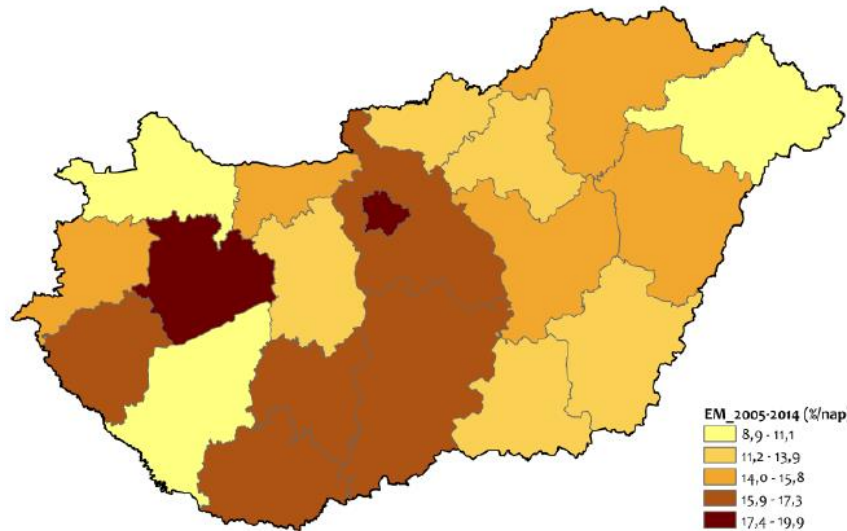
GMT impacts

- Increasing number of extreme weather situations (flood, drought) (12 points)



GMT impacts

- **Health effects of climate change (premature deaths, new contagious diseases)** (9 points)



*Extra premature deaths (%) on summer heatwave days (2005-2014)
(1st May – 30 September)*

Calculations state that heatwaves on 2015's summer caused 1800 premature deaths in Hungary.

GMT impacts

- **Increase of pollution, emission** (9 points)



GMT impacts

- **Increasing demand for water – decreasing amount of base water** (9 points)



River Danube in 2015's summer at Győr city



Hungary, summer of 2015

GMT impacts

- **Negative effects of free trade agreements** (7 points)

TRANSATLANTIC TRADE AND INVESTMENT PARTNERSHIP



„may undermine our environmental achievements and further development; and may attack environmental law system.”

GMT impacts

- **Hungary may become destination for migrants** (6 points)



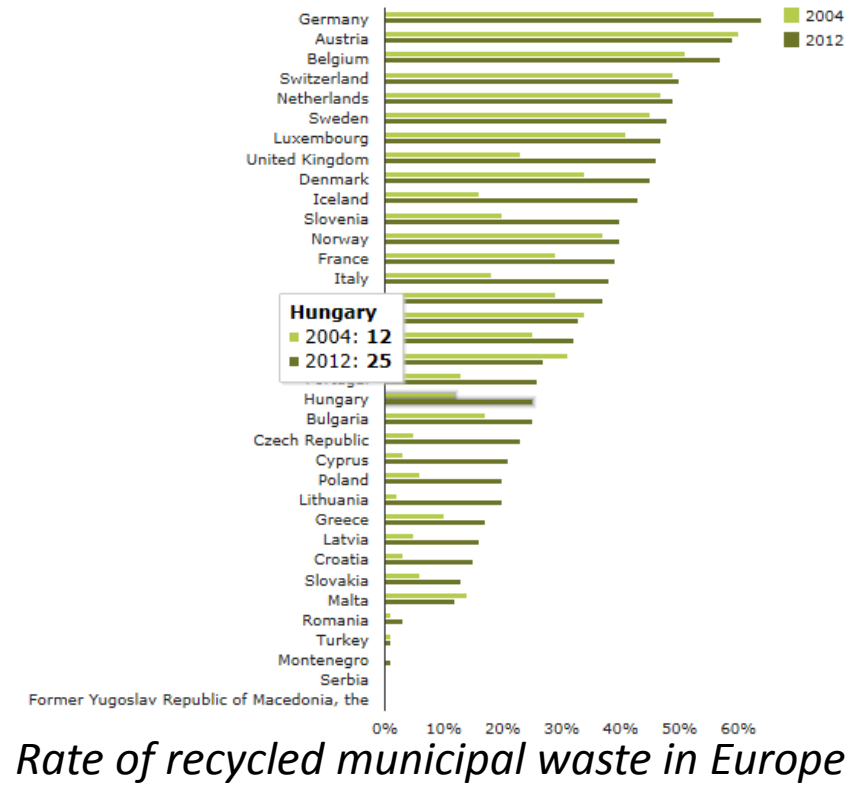
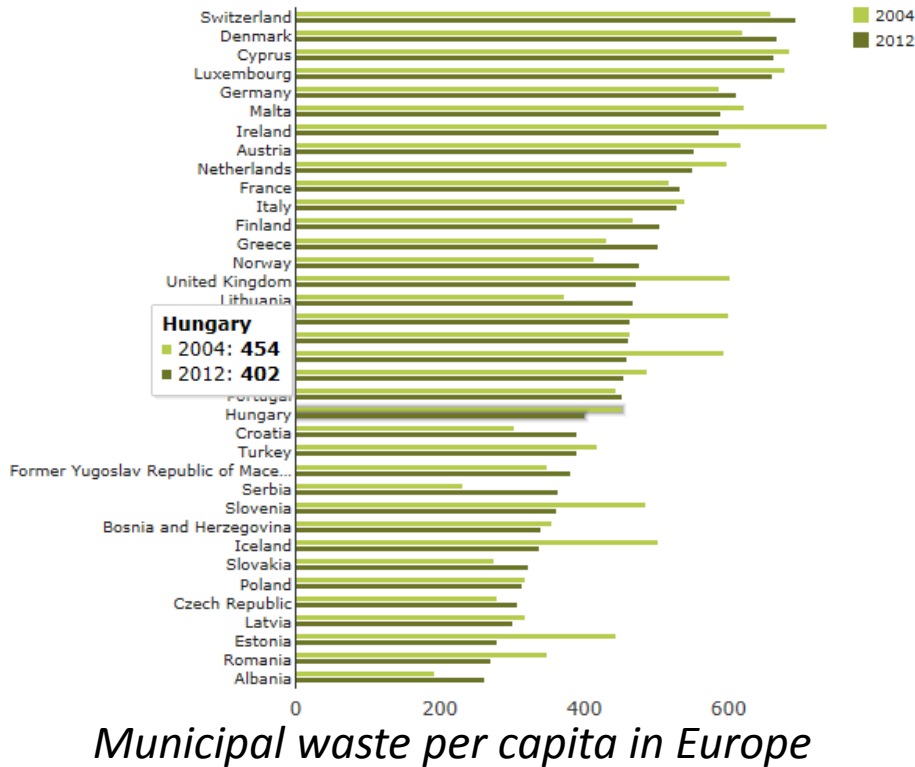
Flood-refugees in India



Sandstorm in Kairo (Asmaa Waguih / Reuters)

GMT impacts

- ## Waste generation (4 points)



GMT impacts

- **+ Use of alternative energies may gain role** (3 points)



GMT impacts

- **Quality and quantity degradation of soil** (3 points)



GMT impacts

- **+ Optimization of material consumption efficiency may gain greater role (due to scarce resources)** (3 points)

„Hungary stipulates reducing its material intensity (DMC/GDP) to 80 % of the 2007 level, by 2020, in the 2011 National Environmental Technology Innovation Strategy (Box 9.3), which is part of the Hungarian National Reform Programme.”

Resource: EEA: More from less

27 April: First Workshop
(expert group and project team)

Until 13 May:
Relevant data, documents
to be sent to project team

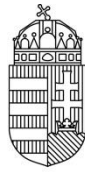
Until 31 May:
First version
(project team)

Until 17 June:
First version to be
checked and completed
(expert group)

Until 31 June:
Second version
(project team)

Until 20 August:
Comments for
project team from
external experts

12 September: Second workshop
(expert group and project team)



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Thank you for your attention!



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