PERFECT MAGIC Matrix

Background and introduction

We have developed the MAGIC Matrix to help partners in the PERFECT project to

- ✓ Have a strategic, robust and focussed approach to developing their Action Plan.
- ✓ Help communicate the benefits of Green Infrastructure (GI) to the target audience
- ✓ Present a set of benefits which are most likely to be relevant and of interest to policy and decision makers.

These are the benefits that have the best chance of influencing the target audience. This will lead to more investment in Green Infrastructure via the targeted policy documents (See Annex 1).

We will be working with the EU GI definition

> *Green infrastructure is a strategically planned network of natural and semi-natural areas with other environmental features designed and managed to deliver a wide range of ecosystem services such as water purification, air quality, space for recreation and climate mitigation and adaptation. This network of green (land) and blue (water) spaces can improve environmental conditions and therefore citizens' health and quality of life. It also supports a green economy, creates job opportunities and enhances biodiversity. The Natura 2000 network constitutes the backbone of the EU green infrastructure.*
>
> (From http://ec.europa.eu/environment/nature/ecosystems/index_en.htm)

Some other definitions of Green Infrastructure use the concept of "multi-functionality", e.g.

> "*Green Infrastructure is a network of multi-functional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities.*"
>
> (UK National Planning Policy Framework, DCLG, 2012)

For the purpose of this document, "green space" refers to public open green space (in urban areas, i.e. parks and gardens etc.). When we mean "any type of green space", we say "Green Infrastructure".

"Multi-functional" Green Infrastructure refers to the multiple functions or benefits of GI. This is one of the key approaches to GI in the PERFECT project.

The same applies to MAGIC = **Multi Advantages of Green Infrastructure in Cities**

The MAGIC Matrix 10 benefits – 10 interventions

To ensure focus and clarity of the message, we have focussed benefits on those relevant to economic aims. All projects and all case studies should demonstrate a contribution to **economic** growth while delivering multiple benefits. In many areas that will include sustainable housing development.

The starting point for the communication are **the needs and policy priorities of the target audience**. We need to communicate that Green Infrastructure investment is a way to achieve their goals and targets. Presenting GI as a solution to a problem can be very powerful. We cannot just make claims. We need robust evidence to back up any claims we make.

The MAGIC MATRIX brings together the most relevant benefits to promote GI from a long list of benefits defined by the EU. (see Annex 2)
Benefits included are
  ➢ Relevant for urban areas
  ➢ Relevant for Economic Policy
  ➢ Well evidenced, including economic value (strong link between cause and effect)[1]
  ➢ Addressing sustainability problems that have significant economic costs

Benefit group	Benefit	Example/ comment
Socio-Economic	Creation of Jobs	Skills, volunteering, entrepreneurs
	Better Health and Human Wellbeing	Physical activity, obesity, asthma
	Enhanced Recreation and Tourism Opportunities	Informal sport, day trips, perception of area
	Sustainable Transport Solutions	Walking, cycling, noise reduction, addressing traffic congestion
	Community Integration & Social Equality[2]	Community cohesion, access to GI
Climate Change	Flood Risk Management	Reduction of river & urban flooding, water retention, reduced soil sealing
	Climate Change adaptation	Urban Heat Island Effect
	Climate Change mitigation	Carbon Storage, biomass energy
Environmental	Water Quality	drinking water, Water Framework Directive as driver
	Air Quality	
	Biodiversity	habitats and ecosystem resilience

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[1] Fact sheets and signposting to evidence under development

[2] This benefit will be difficult to prove with "hard" evidence. However, it is very important to several project partners. We may provide "soft" evidence like showing how it has changed people's lives. We can also create a set of quantifiable and more robust indicators, such as reduction in crime and anti-social behaviour, number of people volunteering in their community, survey responses , reduction of people receiving social benefit payments etc

The MAGIC Matrix

The Magic Matrix can address some challenging questions from the target audience:

➢ How exactly would you go about delivering those benefits?
➢ What kind of Green Infrastructure are you talking about?
➢ How will we get multiple benefits from one investment?
➢ Is the investment worth it? What will I get back?

The MAGIC matrix shows how a specific type of intervention (or action or investment) will deliver <u>multiple</u> benefits:

GI Intervention	GI Benefit										
	Jobs	Health	Rcr.&Tourism	Trans-port	Integr. & Equal.	Flood Risk	CC Adap	CC Mitig	Water quality	Air Quality	Bio-diversity
Green roof	+	++	+	-	-	+++	++	+	+++	+++	++
Green facade	+	++	+	-	-	+	+	+	+	+++	+
Wetland creation	+	+	+	-	-	+++	+	+++	+++	-	+++
Woodland creation (rural)	++	++	++	-	-	++	-	+++	++	+	+++
Urban tree planting	+	+++	+	+++	+++	+++	+++	++	+++	+++	++
Greenspace creation	+	+++	+++	+++	+++	+++	+++	+	+	+++	++
Greenspace enhancement	+	++	++	+	++	+	++	+	+	++	++
SUDS scheme	++	++	+	+	+	+++	++	+	++	+	++
Sust. & Innovative Farming practices[3]	++	+	+	-	+	++	-	++	+++	+	+++
People Project[4]	++	+++	-	++	+++	-	-	-	+	+	+

Benefits – none (no evidence) + Low (limited evidence)
++ Medium (some evidence) +++ High (robust evidence)

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[3] E.g. local food, change in land management (for flood risk management), organic or urban farming
[4] All the other investment types are capital investment. This one is about working with the community, so that people use new or existing GI assets to the best effect, e.g. exercise in greenspace for health, environmental volunteering, citizen science projects etc. This also includes promotion of GI and awareness raising.

Using the MAGIC Matrix

- ➤ The Magic Matrix is an approach, a way of thinking
- ➤ **Use the Magic Matrix to guide your action plan development**
- ➤ **Use the Magic Matrix to develop a Monitoring and Evaluation framework for your action plan**
- ➤ **Individual aspects of your monitoring and evaluation may later inform an Interreg "Good Practice" example or a PERFECT case study** (TCPA will lead and co-ordinate both)
- ➤ Focus on the benefits and interventions that most matter to your location
- ➤ Bring in benefits (from long list) under the headings of Magic Matrix where possible (e.g. "reduction of soil sealing" under "flood risk management")
- ➤ IF you have really strong (economic) evidence, that does not seem to fit under the headings of the Magic Matrix, do not let this stop you presenting this to decision makers anyway
- ➤ Use it for communication and influencing (advocacy, championing)
- ➤ Collect as much information as possible about the problems - your beneficial GI investment will be the solution to the problem. The bigger the problem, the greater the need for a solution!
- ➤ Collect as much (local & national) evidence as possible linking the investment and the benefits
- ➤ Make use of generic academic and international evidence
- ➤ Develop a detailed "story" for the most important "cells" in the above Matrix
- ➤ Example for green roofs (apply to other interventions):
    - o How exactly will creating green roofs contribute to air quality?
    - o What kind of green roofs do you need?
    - o Where will it be?
    - o What does the scientific literature say how green roofs reduce air pollution?
    - o What kind of air pollution do green roofs reduce best?
    - o What is the expected reduction in %?
    - o What is the positive impact on human health?
    - o Why? How does this work?
    - o What are expected cost savings in the health system?
- ➤ Make use of the fact sheets that we will develop as part of the PERFECT project to help make your argument to policy makers
- ➤ Collect local and country-specific evidence of the benefits (qualitative, quantitative and economic €€) to strengthen the business case for investment in GI.
- ➤ Case studies and "people stories" can support the multiple benefits of GI interventions

Annex 1 Target Policy documents of PERFECT partners

Ref	Location	responsible body	Rural/ urban	policy document	Structural Funds link
1	Cornwall (UK)	Cornwall County Council	mainly rural	European Structural Investment Fund/ ERDF/Thematic objective 6 (Cornwall)	Yes
2	Somogy County (Hungary)	Managing Authority for Reg. Dev.Prog., Deputy State-Secretariat of Ec. Dev. Prog., Ministry for National Economy	rural	Territorial and Settlement Development Programme operational Programme	Yes
3	Ferrara (Italy)	Municipality of Ferrara	urban	Ferrara Council Structural Plan	No
4	Styria (Austria)	Provincial Government of Styria, Department for environment and spatial planning	rural & urban	Spatial Planning Law of Styria	No
5	Bratislava (Slovakia)	Ministry of the Environment of Slovak republic, section of environmental programmes and projects	urban	Operational Programme Quality of the Environment for the 2014-2020 period (Bratislava)	Yes
6	Kansen Voor West (Netherlands)	City of Amsterdam	rural & urban	The ERDF Operational Programm Kansen Voor West 2014-2020	Yes
7	Ljubljana (Slovenia)	Ministry for Environment and Spatial Planning, Directorate for Spatial Planning, Construction and Housing (MESP)	urban	OP for the implementation of the EU Cohesion Policy 2014-2020	Yes

Annex 2 Long list of GI benefits

(Edited and extended – based on those listed in Building a Green Infrastructure for Europe
(European Commission, 2013)

Benefit Group	Benefit
Biodiversity	Improved habitats for wildlife
	Ecological corridors
	Landscape permeability
Climate Change	Flood alleviation
	flood risk mitigation (river)
	urban flooding/ water retention(SUDS)
	Strengthening ecosystems resilience
	Carbon storage and sequestration
	Mitigation of urban heat island effects
	Disaster prevention (e.g. storms, forest fires, landslides)
Environmental	Reduction in noise/ tranquillity
	Prevention or mitigation of Soil contamination
	Provision of clean water & removal of pollutants from water
	Removal of pollutants from air
	Pollination enhancement
	Protection against soil erosion
	Increased pest control
	Improvement of land quality
	Mitigation of land take and soil sealing
Socio-Economic	Better health and human well-being
	mental health
	physical health
	tackling obesity
	encouraging physical activity/ physical inactivity
	Creation of jobs
	Diversification of local economy
	More attractive, greener cities
	Higher property values
	Local distinctiveness
	More integrated energy solutions
	More integrated transport solutions
	Enhanced tourism opportunities
	Enhanced recreation opportunities
	Transport: reduction in traffic congestion
	Transport - reduction in road deaths & serious accidents via changes to mode of transport/better protection of cyclists
	Reduction in crime
	Reduction in anti-social behaviour