

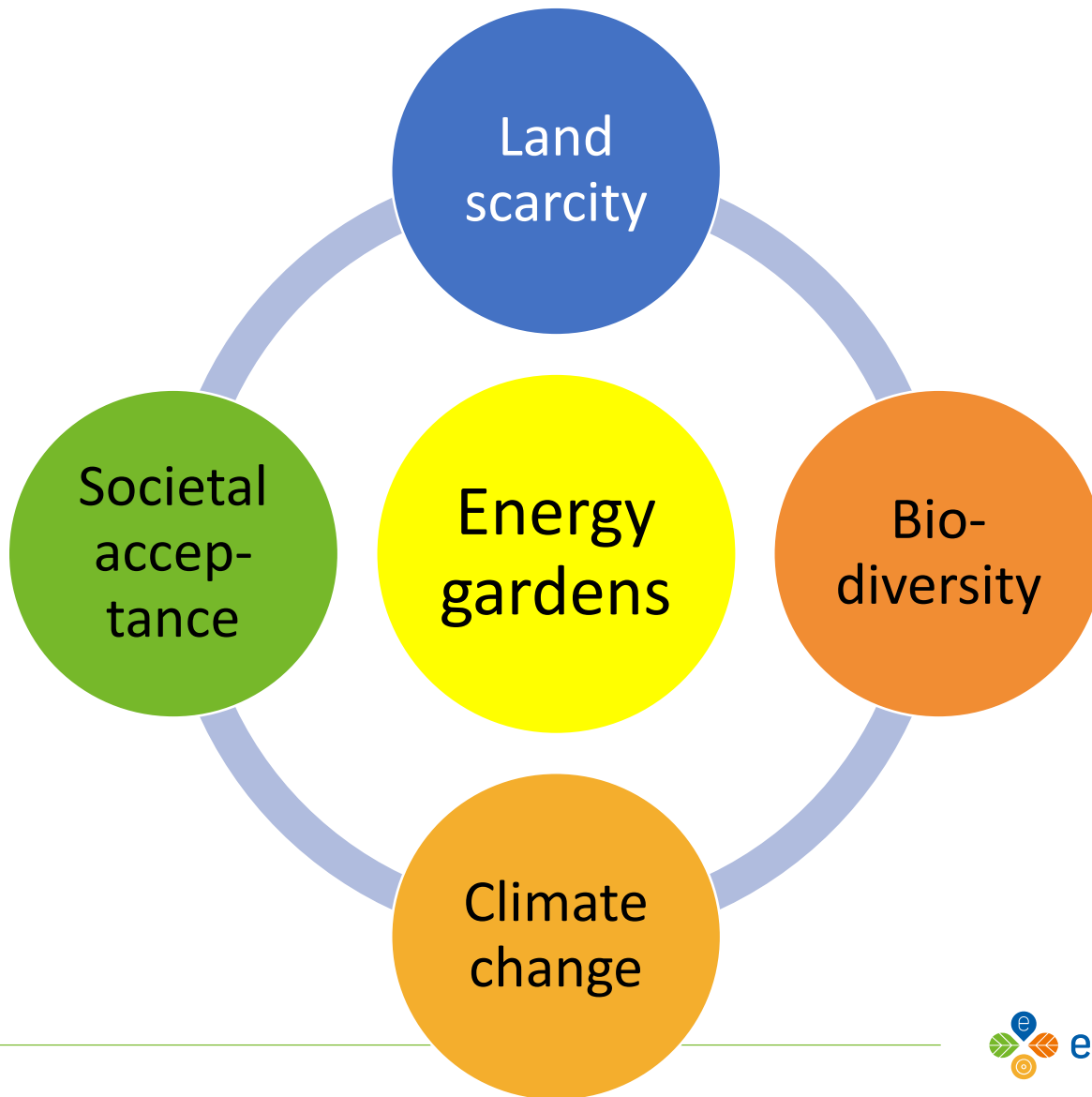
Energy Gardens, Experience nature and environment in a solar park





- Energy Gardens is a concept of the Nature and Environment Federations (NMF) in The Netherlands
- NMF is a non-profit NGO and serves interest and supports local nature and environment organizations, and energy cooperatives
- Focus on environmental preservation, stimulating renewable energy and preventing climate change
- NMF does not take any commercial interest in solar parks, operates independently and cost neutral. Role is to enthuse, promote, guide and support Energy Gardens, by consultancy and sharing information, knowledge and experience.

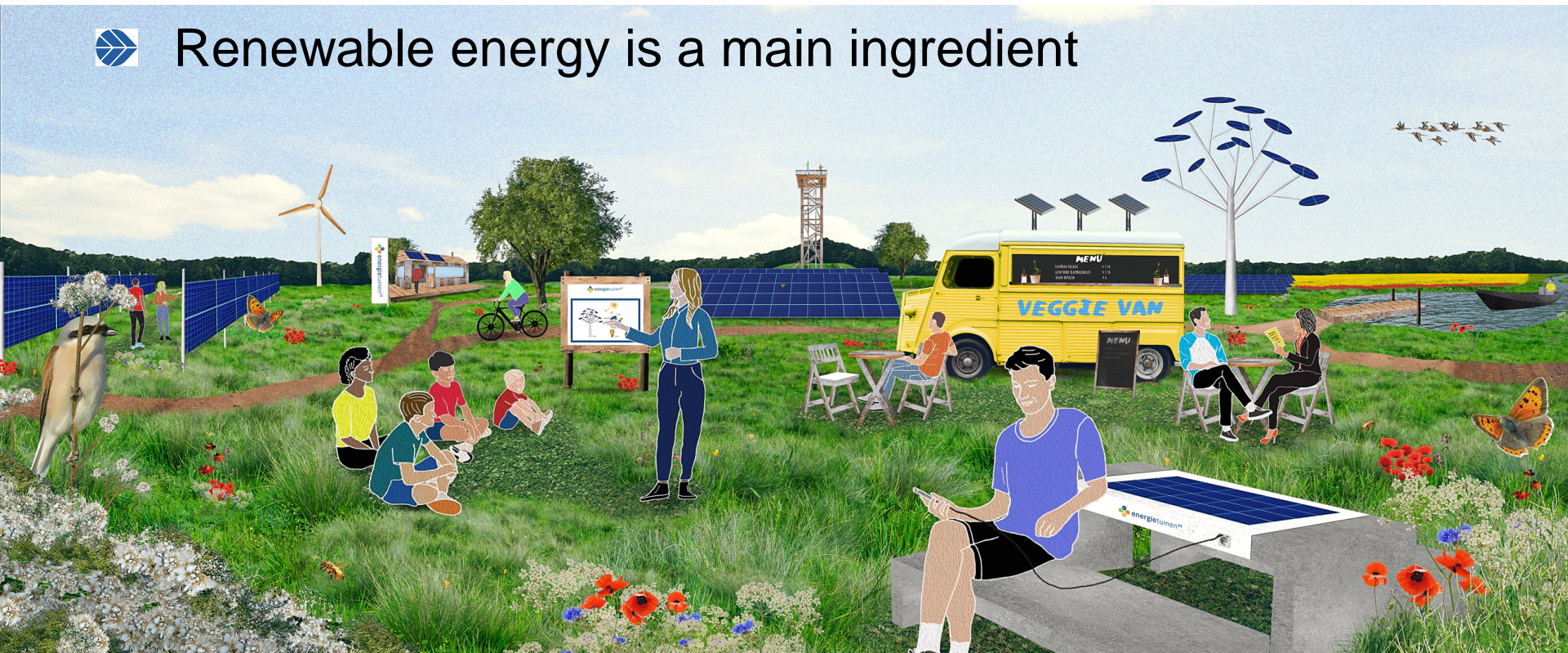
WHY: Combining challenges



Basics

HOW: Process and design principles

- Multi-purpose space use
- Engaging all stakeholders in design process and development
- Designed for humans ánd nature
- Renewable energy is a main ingredient



Basics

WHAT: Ingredients

Public/Accessible



Biodiversity



Recreation



Education



Food forest/agriculture



Innovation



Iconic/artistic



Participation



Pilots

Eerste Energietuinen Nederland

- Mastwijk, Utrecht
- Wijhe, Overijssel
- Assen, Drenthe
- Zelkova, Gelderland
- Griendtsveen, Limburg



Pilots

Main characteristics

	Area totaal	Solar park	% Societal functions	Electrical power	# Housholds
Mastwijk, Utrecht	20 ha.	12 ha.	40%	10,9 MW	3.000
Assen-Zuid, Drenthe	53 ha.	23 ha.	56%	21,3 MW	6.000
Wijhe, Overijssel	25 ha.	8 ha.	68%	7,8 MW	1.900



Challenge!!

How to earn money with societal functions

Example

Solar Park 'de Kwekerij', Hengelo (NLD)



Example

Energy Garden 'Assen-Zuid' (NLD)



Butterflies and bees

View point

Hedges and ditches – no fences

Education and recreation

Hiking trail

Natural pools and amphibians

Example Energy Garden 'Assen-Zuid'

Foodproduction

Hiking trail

Butterflies
and bees

Hedges and
ditches – no
fences

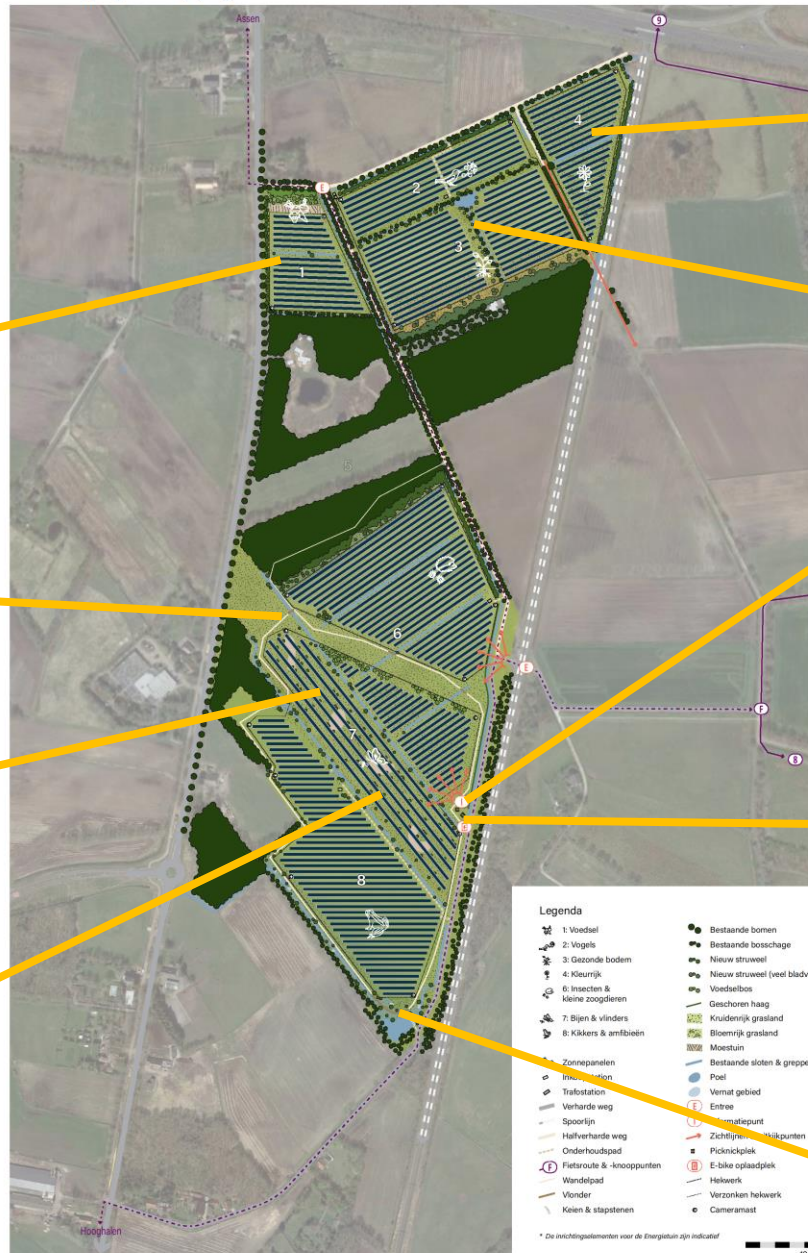
Colorful

Healthy soil

Education and
recreation

View point
and art

Natural pool and
amphibians



Lessons learned

Some challenges

- To convince (commercial) developers and policy makers to choose for Energy Gardens in stead of traditional solar parks
- To accept lower financial return
- To create funding for the maintenance of societal functions in Energy Gardens
- To organize and support activities by volunteers and visitors in the Energy Gardens
- Local ownership is not only 'financial', but also involves 'engagement'. This needs to be accomodated by the development process

Thank you!

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