

Sjálfbærnimat íslenskra vegaf framkvæmda

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MANNVIT



Sköpum og stuðlum
að sjálfbæru samfélagi

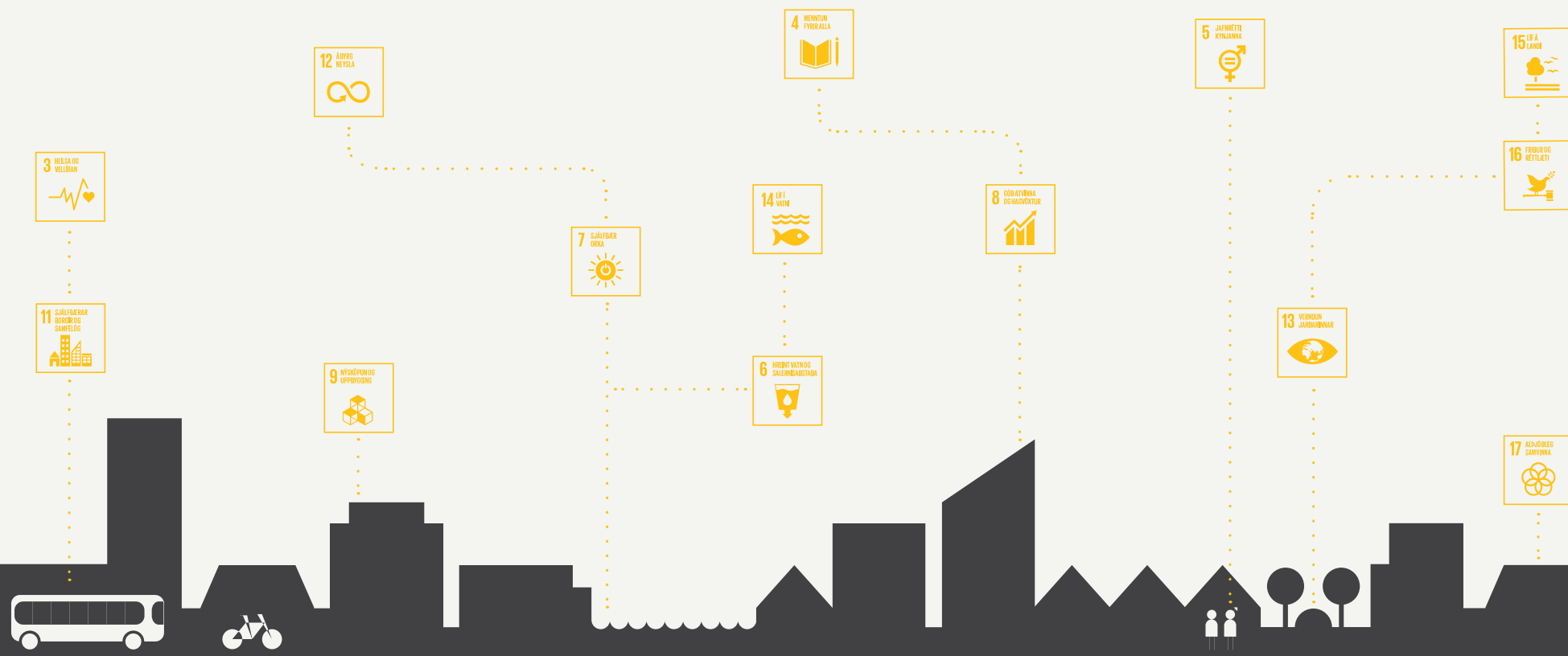
Sköpum & stuðlum að sjálfbærri samfélagi





Heimsmarkmið SP

Mannvit vinnur að því að framfylgja 14 af 17 heimsmarkmiðum SP



“Better construction and use of buildings in the EU would influence

42% of our final energy consumption,

about **35% of our greenhouse gas emissions**

and more than **50% of all extracted materials;**

it could also help us save up to **30% water”**

VOTTUNARKERFI

Vottunarkerfi

Til eru margar mismunandi tegundir umhverfisvottana fyrir byggingar, skipulag og innviði en almennt má segja að markmiðin með notkun þeirra séu að:

- Auka gæði hönnunar, framkvæmdar og notkunar
- Draga úr neikvæðum umhverfisáhrifum
- Byggja heilnæmt og öruggt
- Draga úr rekstrarkostnaði

Vottunarkerfi



Vottunarkerfi



CEEQUAL
delivered by bre

UN Sustainable Development Goals and the BREEAM Family of Standards and Tools



MANNVIT

SUSTAINABLE DEVELOPMENT GOALS	BREEAM's Overarching Contribution to Sustainable Development Goals	Building Standards BREEAM delivered by bve HOME QUALITY MARK	Communities Standard BREEAM delivered by bve	Infrastructure Standard CEEQUAL delivered by bve	Shelter and Settlement Sustainability Tool SM QSAND
1 NO POVERTY End poverty in all its forms everywhere	Encourages the delivery of assets that are resilient and that use resources efficiently in order to reduce operational costs connected to the built environment (e.g. helping to alleviate fuel poverty; maintenance costs; access to affordable transport)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2 ZERO HUNGER End hunger, achieve food security and improved nutrition and promote sustainable agriculture	Encourages the delivery of assets that use land and resources efficiently, thereby maximizing opportunities for self-help and relieving pressure on agricultural land and resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 GOOD HEALTH AND WELL-BEING Ensure healthy lives and promote wellbeing for all at all ages	Encourages the provision of comfortable, healthy and safe internal and external environments for asset users and others within the vicinity	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4 QUALITY EDUCATION Ensure inclusive and quality education for all and promote lifelong learning	Encourages the provision of education and training opportunities to local communities, plus encourages ongoing learning through training and development courses for trades and professionals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5 GENDER EQUALITY Achieve gender equality and empower all women and girls	Encourages responsible sourcing and procurement principles in construction material supply chains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 CLEAN WATER AND SANITATION Ensure access to water and sanitation for all	Encourages the provision of water efficient solutions, systems and equipment that minimise water consumption, whilst maintaining a clean and reliable supply	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7 AFFORDABLE AND CLEAN ENERGY Ensure access to affordable, reliable, sustainable and modern energy for all	Encourages the provision of energy efficient solutions, systems and equipment that minimise energy consumption and carbon dioxide emissions, whilst maintaining a reliable supply	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8 DECENT WORK AND ECONOMIC GROWTH Promote inclusive and sustainable economic growth, employment and decent work for all	Encourages measures that result in a positive economic impact and provision of training and skills to the local community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE Build resilient infrastructure, promote sustainable industrialisation and foster innovation	Promotes the delivery of sustainable and resilient buildings and infrastructure, and encourages and recognises innovations that improve the sustainability performance of assets and provides learning opportunities for wider dissemination	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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10 REDUCED INEQUALITIES Reduce inequality within and among countries	Encourages measures that result in a positive social impact and inclusivity, as well as encouraging responsible sourcing and procurement principles in construction material supply chains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11 SUSTAINABLE CITIES AND COMMUNITIES Make cities inclusive, safe, resilient and sustainable	Promotes the development of sustainable communities and encourages access to sustainable transport, delivery of affordable and safe homes, implementation of flood resilience measures, minimisation of air pollution, and access to public and green space	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
12 RESPONSIBLE CONSUMPTION AND PRODUCTION Ensure sustainable consumption and production patterns	Encourages the sustainable procurement and use of construction materials by recognising materials that are reused or recycled, are used in an efficient manner, have a low environmental impact, are sourced in a responsible way, and are durable and resilient	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
13 CLIMATE ACTION Take urgent action to combat climate change and its impacts	Encourages the sustainable use of energy, minimisation of greenhouse gas emissions, and implementation of climate change adaptation and flood resilience measures in one of the biggest contributing sectors globally	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
14 LIFE BELOW WATER Conserve and sustainably use the oceans, seas and marine resources	Encourages the prevention and control of pollution and surface water runoff associated with the location and use of assets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15 LIFE ON LAND Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss	Encourages sustainable land use, protection and creation of ecological features, and improvement of long term biodiversity for asset sites and surrounding land	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
16 PEACE, JUSTICE AND STRONG INSTITUTIONS Promote just, peaceful and inclusive societies	Encourages responsible sourcing and procurement principles in construction material supply chains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17 PARTNERSHIPS FOR THE GOALS Revitalise the global partnership for sustainable development	Encourages the creation of strong international partnerships and relationships across policy, property, infrastructure and the supply chain to deliver and manage sustainable assets and communities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
KEY <input checked="" type="checkbox"/> Significant contribution to meeting the UN goals and targets <input type="checkbox"/> Some contribution to meeting the UN goals and targets <input type="checkbox"/> Limited or indirect contribution to meeting the UN goals and targets					

Einkunnir

- Matskerfið byggir á 8 mismunandi köflum sem hafa ákveðið vægi
- Hver kafli inniheldur matsþætti sem bera ákveðinn stigafjölda
- 30 matsþættir í heildina
- Ná þarf a.m.k. 30% til þess að fá Pass einkunn

Einkunn	Vægi
Pass	≥ 30 %
Good	≥ 45 %
Very Good	> 60 %
Excellent	> 75 %
Outstanding	≥ 90%

Kaflar og vægi

- 1. Verkefnisstjórnun (11%)**
(e. Management)
- 2. Seigla (13%)**
(e. Resilience)
- 3. Samfélag og Hagsmunaaðilar (11%)**
(e. Communities and Stakeholders)
- 4. Landnotkun og vistfræði (11%)**
(e. Land Use and Ecology)
- 5. Landslag og menningarminjar (8%)**
(e. Landscape and historic environment)
- 6. Mengun (8%)**
(e. Pollution)

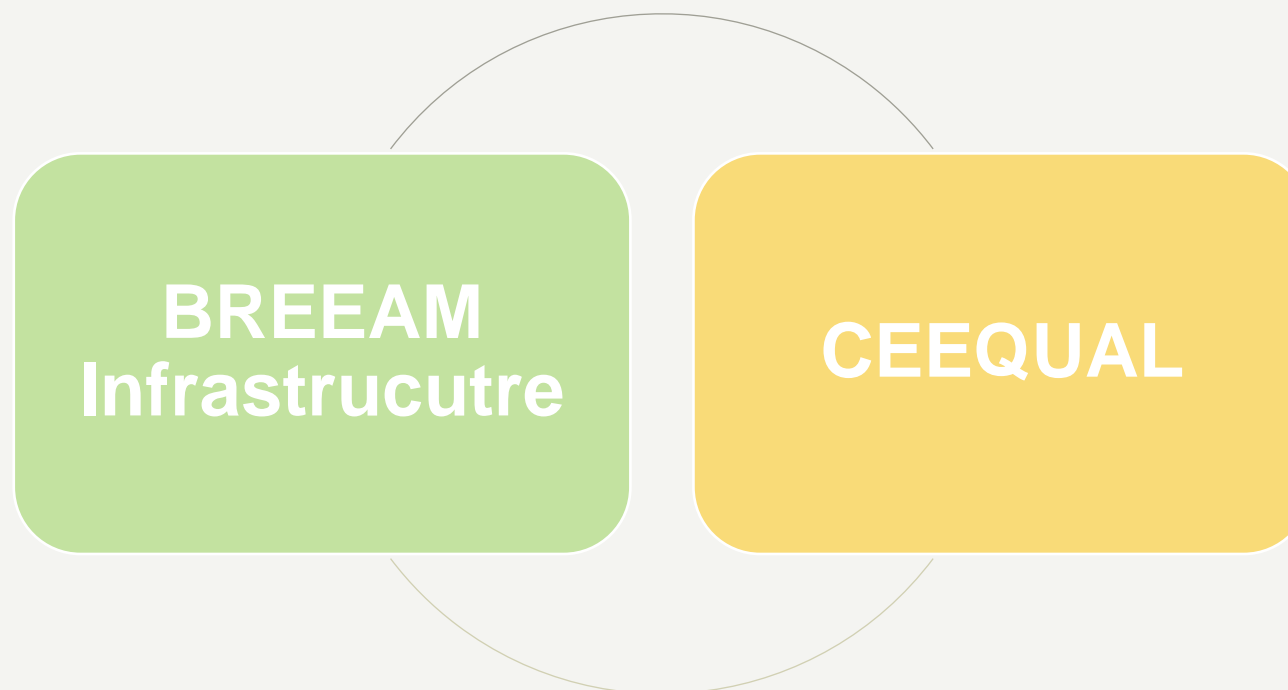
- 7. Efnisnotkun (þ.m.t. Úrgangur) (15%)**
(e. Materials, including waste)
- 8. Orka og kolefni í rekstri (5%)**
(e. Energy and carbon, operational)
- 9. Orka og kolefni í framkvæmd (6%)**
(e. Energy and carbon, construction)
- 10. Vatnsnotkun (3%)**
(e. Water Use)
- 11. Samgöngur (9%)**
(e. Transport)

Auðlindanotkun 29%
(e. Resource use)

TILVIKSRANNSÓKN

Nýr Suðurlandsvegur

Innviðavottun





Nýr Suðurlandsvegur

Unnið er að breikkun Suðurlandsvegar milli Hveragerðis og Selfoss, um er að ræða 12 km kafla frá Kambrótum að vegamótum Hringvegar og Biskupstungnabrautar.

Aðferð

- Notast var við BREEAM Infrastructure Pilot staðalinn
- Metin frammistaða í stefnumótunarhluta annars vegar og hönnunar- og framkvæmdahluta vottunarinnar hins vegar.
- Tekin voru viðtöl við fulltrúa Vegagerðarinnar og Mannvits ásamt því að skoðuð voru aðgengileg gögn á netinu.
- Skoðuð var frammistaða miðað við núverandi verklag og lagt mat á mögulega frammistöðu miðað við litlar verklagsbreytingar.

Niðurstaða

Stefnumótunarhluti

Matsþættir	Náð stig	Möguleg stig	Heildar vægi flokks
Samþætt hönnun	1,9%	4,7%	9%
Sveigjanleiki	1,7%	6,7%	10%
Hagsmunaaðilar	0,0%	1,7%	9%
Velferð	0,0%	5,5%	11%
Samgöngur	0,0%	9,0%	9%
Landnotkun og vistfræði	4,0%	6,0%	8%
Landslag og menningarminjar	3,0%	6,0%	6%
Mengun	0,0%	6,0%	8%
Efni	0,0%	7,3%	11%
Kolefnislosun og orka	0,0%	0,0%	13%
Úrgangur	0,0%	4,0%	4%
Vatn	0,0%	0,0%	3%
Nýsköpun	0,0%	0,0%	10%
Samtals	11%	57%	110%

Hönnunar- og framkvæmdahluti

Matsþættir	Náð stig	Möguleg stig	Heildar vægi flokks
Samþætt hönnun	0,0%	3,4%	9%
Þanþol	1,3%	5,0%	10%
Hagsmunaaðilar	1,1%	7,4%	9%
Velferð	0,0%	0,0%	11%
Samgöngur	0,0%	2,3%	9%
Landnotkun og vistfræði	0,5%	0,9%	8%
Landslag og menningarminjar	1,5%	6,0%	6%
Mengun	0,7%	1,5%	8%
Efni	0,6%	3,2%	11%
Kolefnislosun og orka	0,0%	1,0%	13%
Úrgangur	0,0%	2,0%	4%
Vatn	0,0%	0,0%	3%
Nýsköpun	0,0%	0,0%	10%
Samtals	6%	33%	110%

Niðurstaða

	Náð stig	Möguleg stig
Stefnumótun	11%	57%
Hönnun og framkvæmd	6%	33%
Samtals	7%	38%

An aerial photograph of a geothermal area, likely a hot spring or geothermal park. The landscape is dominated by brown, mineral-rich water pools and streams, interspersed with patches of white and light blue mineral deposits. Several wooden walkways or bridges are visible, crossing the water and providing access to different areas. The overall scene is a complex network of water and mineral formations.

Takk fyrir

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