Rudus Biodiversity Programme

Experiences and Opportunities for Precast Sector

Quality and Environmental Manager

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Rudus is part of the leading building materials business in the world - CRH plc Group

- CRH manufactures and supplies a range of integrated building materials, products and innovative solutions for the construction industry.
- Our products can be found throughout the built environment from major public infrastructure to commercial buildings and residential structures.
**Rudus**

**Business Operations**
- Concrete and Aggregate Materials
- Concrete Products
- Recycling

**Percentage of sales**
- Concrete and Aggregate Materials: 32%
- Concrete Products: 68%

**Sales**
- 399 M€

**Personnel**
- appr. 961

**Rudus in Finland**

<table>
<thead>
<tr>
<th>Department</th>
<th>Plants</th>
<th>Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ready Mixed Concrete</td>
<td>49</td>
<td>101</td>
</tr>
<tr>
<td>Aggregates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gravel pits and rock quarries</td>
<td>86</td>
<td></td>
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<tr>
<td>Crushing plants</td>
<td>11</td>
<td>103</td>
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<tr>
<td>Recycling</td>
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<tr>
<td>Concrete waste reception centres</td>
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<tr>
<td>Fly ash delivery points</td>
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</tr>
<tr>
<td>Green soil reception points</td>
<td>10</td>
<td></td>
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<tr>
<td>Personnel</td>
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<tr>
<td>Concrete Products</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plants</td>
<td>17</td>
<td>515</td>
</tr>
<tr>
<td>Personnel</td>
<td></td>
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</tr>
</tbody>
</table>
Concrete Products

**Infra Elements**
- Nurmijärvi
- Kurikka
- Lappeenranta

**Water Solutions**
- Lohja
- Tampere
- Oulu

**Facades and Stairs**
- Tuusula
- Kitee
- Savonlinna
- Savonranta
- Suonenjoki
- Suomussalmi

**Architectural Products**
- Tuusula
- Tampere
- Orimattila
- Oulu

**Elpo Elements**
- Kotka
As a pioneer in environmental responsibility

1990
• Research and development of “Betoroc”, recycled concrete, is started.

2000
• Research and development of the low carbon “Rudus Green Concrete”, is started.

2010
• The biodiversity programme, “the Rudus LUMO programme”, is launched.
• Research and development of “Uuma Products” made from recycled concrete, is started.

2020
• Environmental Responsibility Programme related to climate change, circular economy and biodiversity is published.
• The process of setting Science-Based Targets for Nature (SBTN), is started.
Rudus Environmental Responsibility Programme

**MISSION**
We create low-carbon solutions for future generations, supporting biodiversity and promoting a circular economy.

**VISION**
We are part of emission-free construction.

**CIRCULAR ECONOMY SOLUTIONS**

**BIODIVERSITY**

**OUR TARGET IS TO BE CARBON NEUTRAL FOR THE ENTIRE OPERATION BY 2050**

- We want to develop and promote our customers' low-carbon goals.
- We invest in the recycling of rock-based building materials and the development of recycling activities.
- We carry out responsible aggregate extraction and contribute to the preservation of biodiversity with our biodiversity programme activity.

**THE INTERMEDIATE GOAL IS TO HALVE OUR EMISSIONS IN OUR ENTIRE VALUE CHAIN BY 2035**
Blast furnace slag from the steel industry
Fly ash from the energy industry
Stone ash from our own soil extraction areas
Recycled blast stones
Biodiversity Programme since 2012
5 most significant reasons for the endangered species in Finland

- Forest Management
- Overgrow of Open Areas
- Construction
- Random Factors
- Chemical Side Effects

The 5th assessment of threatened species in Finland, Ministry of the Environment and the Finnish Environment Institute (SYKE) report 2019
And we do have open areas!
From Project to Action

Goal: The soil extraction area is naturally more diverse at the end of the operation than it was at the start of the operation.
Business as usual

New ways to protect biodiversity
How do we do it

• We save habitats, such as:
  • Rock piles
  • Steep sand banks
  • Meadows
  • Wetlands
  • Rotting wood

• We don’t plant trees
  • If it’s unlikely they will ever grow
  • If open area is much more valuable for the nature around
  • If our neighbours like to use wide and open area for sports like frisbee golf, horseriding or skiing
  • If the planned land use is not forest industry
Local Nature

How do we do it

• We observe and study local nature
• We make local aftercare plans
• We try new ideas with pilot projects
Instructions

How do we do it

Nest for Northern Wheatear

Nest for Sand Martin
Biodiversity of factory environments

- Nesting opportunities for birds.
- Feeding areas for bats and possible breeding places.
- The concrete slope was covered with the seeds of threatened species.
- Stone mounds piled up from concrete blocks serve as nesting and shelter places for animals and at the same time bind carbon dioxide from the atmosphere.
New Business Opportunities

From old gravel extraction areas to valuable natural sites and recreation areas
Better cooperation with neighbors and authorities - operating conditions improve

Seed banks of endangered species - impacts to biodiversity in large areas
New business opportunities; plant seeds and areas for ecological compensations

New operating models and products through collaborative projects
New business opportunities; Spawning and baby fish rocks Ecosystem hotels

Effective measures and carbon sequestration through R&D
Preventing climate impacts and reducing own carbon footprint
How the future looks like

WE HAVE JOINED THE SCIENCE BASED TARGETS NETWORK
CORPORATE ENGAGEMENT PROGRAM

By joining the program we are working to ensure the water, ocean, land and biodiversity - the global commons we all depend upon - are protected and restored. We are helping developing and road-testing the methods, tools and guidance related to science-based nature targets to ensure they are user-friendly and easy to implement.
Thank you!