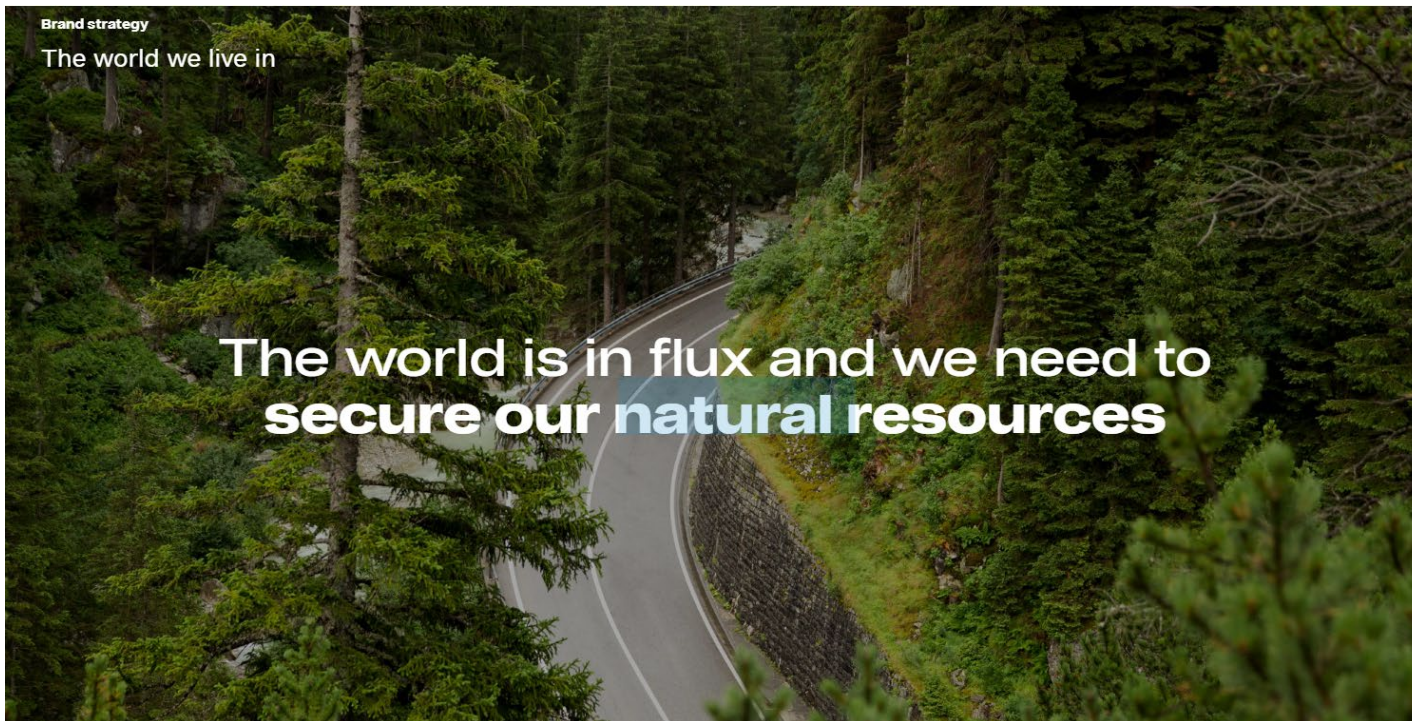


Mitigate the impact of natural hazards (floods, cold, heat, landslides, mud- and debris flows, rockfall...)

Natural hazard management

The world is in flux and we need to protect our natural resources





Key trends in Natural hazard management

- More **challenging job sites**:
more remote, deeper, higher, and more dangerous
- Pressure for **more environmentally friendly** solutions/materials
- The market is asking for the **longest possible lifetime solutions**
- Effectively managing the **impact of climate change**
- Needs for infrastructure vs. protecting the natural environment
- Skilled resources are scarce, and special equipment expensive

The way we build roads and structures and integrate them into our landscapes needs to change. We need solid and safe infrastructure.

- **Different applications** we are active in:
 - Slope stabilization (riverbanks, hillsides, and mountains)
 - Rockfall and avalanche protection (mountain area)
 - Mudflow & debris flow

- Durable applications designed to protect and secure for a longer lifetime are key.

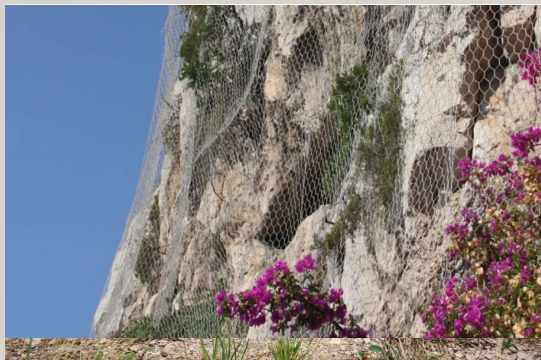
The solutions should **perfectly fit project requirements**, giving you peace of mind to deliver

Where can you find our wire solutions?

Application	Subcomponent	Bekaert Products
Slope stabilization	Hillside stabilization	7-wire strands, wire for a mesh system
Slope stabilization	Riverbank stabilization	Gabon wire solutions for riverbank stabilization
Natural hazard protection	Rockfall & avalanche protection	Wire for rock protection nets (different shapes), ropes
Natural hazard protection	Mudflow & debris mitigation	Wire for rock protection nets and ropes, Bezinal®5000 gabions for flood control

- **Advantage of starting early** in the project design process:
 - **Compliant** with the strict building regulations while meeting sustainability requirements
 - **Save time and money** with lightweight and fast installation. No special equipment and resources are needed.
 - **Up to 64% lower CO₂ footprint** vs. concrete alternatives.

Hillside stabilization



- 7-wire strands for rock protection
- Wire for mesh net system

Rock protection wire and strands



- Create a net structure that secures irregular and unstable rock formations. The strands stay strong in harsh weather conditions. They can resist the impact of sliding and falling rocks. This high-tensile steel wire strand is easy to process without losing its mechanical properties.
- **Key benefits:**
 - Strong and effective barrier against sliding landmasses
 - Bezinal® coatings protect the wires against harsh weather conditions and extreme temperatures
 - Easy to process without losing its mechanical properties
 - Produced according to EN-10264-2 specifications

River bank stabilization



Wire solutions for soil and river banks

- Strong and sturdy mesh system for **up to 100 years of lifetime**
- **Effective protection** against erosion by the natural river flow
- **Safeguards urban areas** from being flooded by high-tide
- No **hindrance for sea or river animals** since the gabion structure allows easy passage
- **Up to 64% lower CO₂ footprint** vs. concrete structures
- **Using local raw materials** (e.g., stones and rocks) enhances the natural look and feel, easy blending with the natural surrounding

Bezinal®5000 reinforced welded gabions systems

Superior Corrosion Resistance



Bezinal®5000 Active coating

Counteracts corrosive attacks,
resulting in up to **100 years of lifetime**
in the most demanding environments
(C4, C5)

Time and cost savings



Easier, faster, and cost-effective construction

Pre-made gabions are easy to install
and fill with local raw materials.
There is no need for specific skilled
workers or special equipment.

The reference as a sustainable alternative



Circular material from cradle-to-grave

Gabions are **eco-friendly, fully recyclable structures**. Using only
locally sourced stones or recycled
materials helps protect the natural
environment.

River bank stabilization



Wire solutions for soil & river bank stabilization

When it comes down to constructing infrastructures for public projects, we know how critical it is to have your structure **withstand the test of time.**

Bezinal®5000 Gabion wire solutions

- 100 years lifetime in the most demanding environments (C4, C5)
- 100 % recyclability
- Up to 50% CO₂ reduction vs. concrete
- Excellent quality and optimal processability
- Continuous quality control: permanent testing in changing conditions
- State-of-the-art, large production capacity with short lead times
- Renowned and established partner within the industry
- Safer working conditions



River bank stabilization

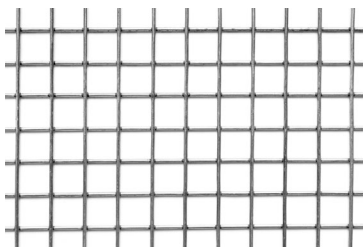


Bezinal®5000 Gabion wire solutions



- The wire has both high **flexibility and high tensile strength**.
- We offer, zinc-aluminum coating as **Bezinal®5000**, so there is no need for post-galvanization, **saving you both time and money**.

Bezinal®5000 Gabion wire solutions



- high-quality steel wire
- advanced zinc-aluminum coating with high coating weight,
- consistent mechanical properties,
- permanent internal and external quality control,
- different make ups available



Rockfall protection



Wire and strands rockfall



- **Challenges**

- Securing irregular and unstable rocks
- Protection against natural hazards: avalanches, mud flows and debris flows
- Harsh weather conditions occur more often due to climate change
- Clear need for proven and reliable long-lasting solutions to avoid complex installation in remote areas

- **Benefits**

- ✓ Our Bezinal® coatings (such like Bezinal®/Bezinal®3000 and Bezalplast®) provide corrosion protection for your project, ensuring a longer lifetime.
- ✓ Fit for downstream processing
- ✓ Partner for co-development