



EMERGING RISK 2025

PT WIJAYA KARYA BETON TBK



Emerging Risk



Seiring dinamika industri konstruksi nasional yang semakin cepat dan kompleks, WIKA Beton menghadapi sejumlah risiko baru (emerging risks) yang muncul dari perubahan teknologi, regulasi, dan kondisi eksternal yang berkembang di luar kendali perusahaan. Risiko-risiko ini belum sepenuhnya tercermin dalam pola risiko historis, namun memiliki potensi material untuk mempengaruhi keberlangsungan operasional, daya saing, serta kemampuan perusahaan dalam memenuhi kebutuhan pasar ke depan. Oleh karena itu, identifikasi dan pemantauan emerging risks menjadi langkah strategis bagi WIKA Beton untuk menjaga ketahanan bisnis dan memastikan kesiapan perusahaan menghadapi lanskap industri yang terus berubah.

As the national construction industry continues to evolve rapidly and grow in complexity, WIKA Beton is exposed to a range of new emerging risks arising from technological shifts, regulatory changes, and external conditions beyond the company's direct control. These risks may not yet be fully reflected in historical risk patterns, but they hold the potential to materially affect operational continuity, competitiveness, and the company's ability to meet future market demands. Accordingly, the identification and monitoring of emerging risks serve as a strategic initiative for WIKA Beton to strengthen business resilience and ensure preparedness in navigating an increasingly dynamic industry landscape.

Jenis Risiko Types of Risk	Deskripsi Risiko Risk Description	Kemungkinan Terjadinya Risiko Likelihood of Risk Occurrence	Peristiwa Risiko Risk Events	Potensi Dampak Finansial Potential Financial Impact	Langkah Mitigasi / Strategi Untuk Merespon Risiko Mitigation Measures / Risk Response Strategies
Risiko Teknologi <i>Technological Risk</i>	Kemajuan teknologi konstruksi digital seperti Building Information Modelling (BIM) tingkat lanjut, Digital Twin, prefabrication automation, dan AI-based design optimization berpotensi mengubah cara proyek infrastruktur direncanakan dan dibangun. Penggunaan automated rebar bending, robotic precast moulding, dan digital quality control dapat menggeser kebutuhan kompetensi tenaga kerja tradisional sekaligus mengubah standar kualitas industri beton nasional. Teknologi ini masih berkembang dan belum memiliki standar nasional, sehingga tingkat kesiapan industri di Indonesia masih rendah. Perubahan ini membawa risiko bahwa perusahaan perlu mengadaptasi model bisnis, proses produksi, dan kompetensi SDM secara besar-besaran untuk tetap kompetitif. <i>Advancements in digital construction technologies such as advanced Building Information Modelling (BIM), Digital Twin, prefabrication automation, and AI-based design optimization have the potential to reshape how infrastructure projects are planned and built. The use of automated rebar bending, robotic precast moulding, and digital quality control may reduce the need for traditional labor competencies while altering the national standards of concrete manufacturing.</i> <i>These technologies are still developing and have not yet reached national standards, resulting in varying levels of readiness within Indonesia's construction industry. This shift presents a risk that companies will need to adapt their business models, production processes, and workforce competencies on a large scale to remain competitive.</i>	Sedang-Tinggi <i>Medium - High</i>	Kewajiban BIM/digitalisasi pada proyek BUMN meningkat lebih cepat daripada kesiapan seluruh pelaku lapangan (pemasok-kontraktor), sehingga mengurangi peluang WIKA Beton dalam tender yang mensyaratkan integrasi digital penuh. <i>The requirement for BIM/digitalization in BUMN projects is advancing faster than the readiness of broader industry stakeholders (suppliers-contractors), reducing WIKA Beton's opportunity in tenders that require full digital integration.</i>	• Kebutuhan investasi besar dalam otomasi pabrik dan teknologi digital (IoT sensors, automated curing, robotic moulding). • Risiko kesenjangan kompetensi tenaga kerja jika perusahaan tidak siap dengan transformasi digital. • Potensi kehilangan proyek jika klien besar (BUMN Karya, swasta) mengharuskan digital-ready precast products • <i>Significant investment needs may arise for automation and digital technologies (IoT sensors, automated curing, robotic moulding).</i> • <i>Risks of competency gaps among personnel if the company is not adequately prepared for digital transformation.</i> • <i>Potential loss of projects when clients (BUMN Karya, private sector) require digital-ready precast products.</i>	• Menyusun Digital Transformation Roadmap untuk meningkatkan kapabilitas teknologi pada proses produksi dan inspeksi kualitas. • Penelitian & pilot project automation-ready precast production di beberapa plant. • Kemitraan dengan universitas, startup teknologi konstruksi, dan produsen software BIM/Digital Twin. • Program reskilling tenaga kerja di bidang BIM, operasional mesin otomatis, dan data-driven manufacturing. • <i>Develop a Digital Transformation Roadmap to enhance technological capabilities in production and quality inspection processes.</i> • <i>Conduct research and pilot automation-ready precast production at selected plants.</i> • <i>Build partnerships with universities, construction technology startups, and BIM/Digital Twin software providers.</i> • <i>Execute reskilling and upskilling programs for employees in BIM, automated machinery operation, and data-driven manufacturing.</i>

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Risiko Lingkungan <i>Environmental Risk</i>	Tren global dan nasional menuju regulasi perlindungan keanekaragaman hayati (biodiversity) semakin kuat, termasuk kewajiban nature-related risk assessment, biodiversity offsets, dan no-net-loss untuk sektor konstruksi dan material. Industri material konstruksi seperti beton, pasir, agregat, dan batu pecah termasuk sektor yang berpotensi terkena regulasi baru terkait perlindungan kawasan ekosistem, sumber daya air, flora-fauna endemik, dan konservasi habitat. Perubahan kebijakan ini masih emerging, namun jika diterapkan, perusahaan seperti WTON dapat menghadapi pembatasan ruang ekstraksi material, peningkatan biaya operasional, kewajiban rehabilitasi, atau perubahan rantai pasok. <i>Global and national trends show a strengthening regulatory framework for biodiversity protection, including nature-related risk assessments, biodiversity offsets, and no-net-loss obligations for the construction materials sector. Construction materials industries such as concrete, sand, aggregate, and crushed stone are among the sectors potentially impacted by regulations related to ecosystem protection, water resources, endemic flora-fauna, and habitat conservation. Policy changes remain emerging, but if applied, companies like WIKA Beton may face limitations in material extraction areas, increased operational costs, rehabilitation obligations, or supply chain disruptions.</i>	Tinggi <i>High</i>	Perubahan kebijakan daerah terkait izin pengambilan material batu, pasir, dan split—terutama pada wilayah yang sedang diperketat pengawasan lingkungannya—dapat menyebabkan penghentian suplai secara mendadak dari quarry tertentu, memicu lonjakan harga material, dan menimbulkan keterlambatan pengiriman ke pabrik WIKA Beton akibat keterbatasan alternatif sumber material di wilayah tersebut. <i>Regional policy changes related to material extraction permits for stone, sand, and aggregate—particularly in areas under tightened environmental monitoring—may lead to sudden discontinuation of supply from certain quarries, causing price spikes and delivery delays to WIKA Beton’s plants due to limited alternative sources.</i>	• Pembatasan operasional supply chain jika sumber material berada dekat area sensitif ekologis. • Kenaikan biaya akibat kewajiban offset, rehabilitasi, sertifikasi biodiversitas, atau penyesuaian sourcing. • Risiko gangguan pasokan jika pemasok agregat tidak dapat memenuhi standar perlindungan biodiversitas • Perubahan preferensi klien ke arah material yang memberikan nilai nature-positive. • Operational limitations in supply chains if material sources are located near ecologically sensitive areas. • Increased costs due to offset obligations, rehabilitation, biodiversity certification, or sourcing adjustments. • Supply disruptions if aggregate suppliers fail to meet biodiversity protection standards. • Shifting client preferences toward nature-positive materials.	• Menyusun kebijakan internal Responsible Sourcing untuk memastikan pemasok material mematuhi standar konservasi. • Melakukan biodiversity screening untuk pemasok agregat dan quarrying sites (meskipun dilakukan vendor, perusahaan harus punya due diligence). • Menjalankan program rehabilitasi area lingkungan bersama pemasok atau pemerintah daerah. • Mengembangkan inovasi material low-impact aggregates, recycled aggregate concrete (RAC), atau material alternatif. • Integrasi TNFD-aligned nature risk assessment ke dalam proses ERM jangka panjang.- • Establish internal Responsible Sourcing policies to ensure material suppliers comply with conservation standards. • Conduct biodiversity screening for aggregate and quarrying suppliers (vendor activities may be outsourced, but the company holds due diligence responsibilities). • Implement environmental rehabilitation programs with suppliers or local governments. • Develop low-impact material innovations such as recycled aggregate concrete (RAC) or alternative aggregates. • Integrate TNFD-aligned nature risk assessments into long-term ERM processes.

Thank You

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