

The Whole Truth.

ABOUT YOUR ROADS, YOUR BOTTOM LINE, AND OUR PLANET.





If you're not looking at the big picture regarding how your roads are an asset, you miss many opportunities to save money.



TODD BURNS — CEO & VISIONARY OF CYPHER ENVIRONMENTAL

THE TRUTH IS, YOU'RE LOSING MONFY.

If you're not looking at the big picture regarding how your roads are an asset, you miss many opportunities to save money. Over two-thirds of the roads on the planet are unpaved. Therefore one of the most relevant ongoing concerns is dust, which, if not managed correctly, will have a profound impact on overall environmental footprint and in communities around the world. Old techniques such as salt and hydrocarbon-based products have been in widespread use for years, although sadly the secondary negative environmental and economic impacts caused by their use are felt by the taxpayer long after these products are applied to our roads.

At Cypher, we address these concerns in a way that has zero negative environmental impact. Our technologies enhance the engineering properties of roads to the point where our clients boast impressive stats on reduced costs and better performance across the board! It adds up to a better bottom line without sacrificing environmental priorities.

We also believe innovation doesn't end in the lab. Our deep-rooted core values breed innovation elsewhere in the business. They have led to the development of some tremendous philanthropic endeavours, such as the Cypher Green Roads[™] program, which helps our clients enhance community relations with their neighbours while simultaneously introducing them to new green technologies. These core values are rooted in the same fundamentals as Corporate Social Responsibility and Environmental Social Governance, and as a supplier to a variety of industry and government partners worldwide, we pride ourselves on our ability to add to those same strategies' of our client partners globally.

Let's improve your roads and bottom line together!

Your ssues. Solved.

The whole truth about the biggest road-related issues that companies and municipalities deal with.

#1 // Understanding the true cost of using corrosive products, such as road salts, on your road network.

60 million tons of road salts were used globally for application to our roadways as a dust suppressant or de-icer in 2018. This is an alarming figure when you consider Michigan's Mackinac Center for Public Policy pegged the total damage done by road salt as high as CAD\$687 per ton applied. Using the Mackinac Center's estimate, these numbers add up to a whopping potential cost of CAD\$ 41,220,000,000 to repair salt damage per year. That's a whole lot of money that could be invested in more meaningful and productive ways!

#2 // Relying on lower-cost, marginal engineering inputs, to produce higher-performing roads.

Clay is normally thought of as a marginal engineering input due to its inherently low CBR value and affinity to swell and lose strength in the presence of water. As a result, clay is a very low-cost material input, and is abundant in many areas of the world. Here comes the good news. When clay is stabilized correctly, these CBR values can increase, and swell potential can decrease to the point where clay can now play a pivotal role in adding value to any new road build globally. Therefore in areas where clay is in abundance, it can now be used for widespread infrastructure enhancements, and even where good quality aggregates do exist, clay can now be introduced to your project to substantially reduce overall material costs.

#3 // Believing that highly specialized and expensive equipment is required to build and cost-effectively maintain roads.

A common misconception would be that highly specialized and expensive equipment and techniques are required to build and maintain roads better. This false belief may hold people back in trying new products that have been developed to help simultaneously reduce operating costs and environmental footprint. In fact, our technologies have been developed for ease of use and adoption by our client partners worldwide and are applied using standard equipment found around the world!

Always what's right.

Meet our best product suite engineered to better your roads, better your bottom line and better our planet.



Superior Dust Control

Primary use is to provide an environmentally friendly alternative for dust control on roads and unpaved surfaces of almost any kind. DUST/BLOKR® contains no chlorides, hydrocarbons or toxic by-products, so it is neither corrosive to vehicles, toxic to roadside vegetation, nor harmful to use around nearby water bodies or environmentally sensitive areas.



Superior Soil Stabilization

A long-term soil stabilizer that is designed to increase stability of high clay content materials, ROAD//STABILIZR® is used to strengthen the treated material by increasing its density and CBR values after compaction.

Better Roads.







Superior Dust Control

90%+

REDUCTION IN AIRBORNE DU
GENERATED FROM ROADS

8

85%+
REDUCTION IN WATER
CONSUMPTION

DUST/BLOKR® is a formula consisting of natural ingredients specifically engineered for unpaved roads of any kind. Applicable to almost any soil type, it is applied using standard equipment and techniques.

DUST/BLOKR® was designed to provide an environmentally friendly, non-corrosive and cost-competitive replacement for calcium and magnesium chloride, as well as hydrocarbon-based products and even water!

DUST/BLOKR® is not adversely affected by heavy rains or long periods of dry weather and has no adverse effect on the environment or vehicles, due to its non-corrosive properties. When used at large-scale mining operations, vast amounts of water, fuel and operating costs are saved.



NON-CORROSIVE & ENVIRONMENTALLY FRIENDLY

- Will not cause corrosion on vehicles or application equipment
- No adverse impact on roadside vegetation



REQUIRES LESS FREQUENT
RE-APPLICATION AS COMPARED TO
TRADITIONAL DUST SUPPRESSANTS



REDUCES MAINTENANCE COSTS

- Enhances engineering properties & stability of the road base
- Reduced need to grade treated roads



INCREASED WATER RESISTANCE RESULTING IN BETTER PERFORMANCE IN ALL WEATHER CONDITIONS

- Helps shed water, resulting in a more stable road in wet conditions
- Does not get slippery when wet

COST COMPETITIVE WITH CHLORIDES & HYDROCARBONS



DRAMATIC FUEL SAVINGS
COMPARED TO WATERING ROADS





Superior Soil Stabilization

90%+

REDUCTION IN AIRBORNE DUST GENERATED FROM ROADS

8

85%+

REDUCTION IN WATER CONSUMPTION

ROAD//STABILIZR® is a highly concentrated, environmentally friendly liquid enzyme-based soil stabilizer specifically engineered for high clay content materials. The solution saves costs through the allowance for use of claybased materials, which are typically marginal in terms of their engineering properties, and turns them into a high performance engineering input.

ROAD//STABILIZR® treated materials exhibit reduced long-term maintenance requirements and produce tangible reductions in rolling resistance, which reduces fuel consumption and improves productivity of your haul fleet. Once applied, ROAD//STABILIZR® will dramatically reduce OPEX from projects ranging from mine sites to municipalities!



NON-CORROSIVE & ENVIRONMENTALLY FRIENDLY

- Will not cause corrosion on vehicles or application equipment
- No adverse impact on roadside vegetation



REDUCED SWELL ALLOWING FOR MORE DURABLE ROADS IN WET WEATHER



PROVIDES SUBSTANTIAL MATERIAL COST-SAVINGS



- Allows for the use of inexpensive in situ, high clay content materials
- Saving on use of expensive aggregates



SIGNIFICANTLY REDUCE LONG TERM MAINTENANCE COSTS

- Reduces dust saves water
- Dramatically reduced required grading frequency
- One application lasts several years

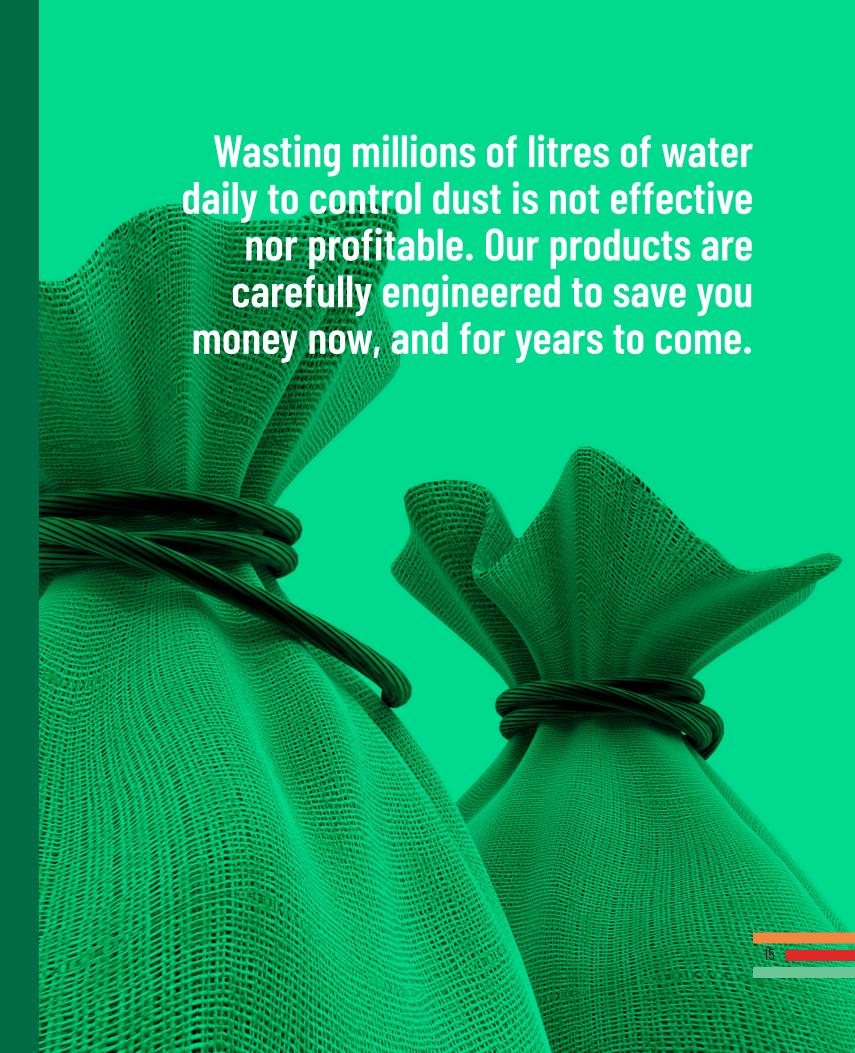


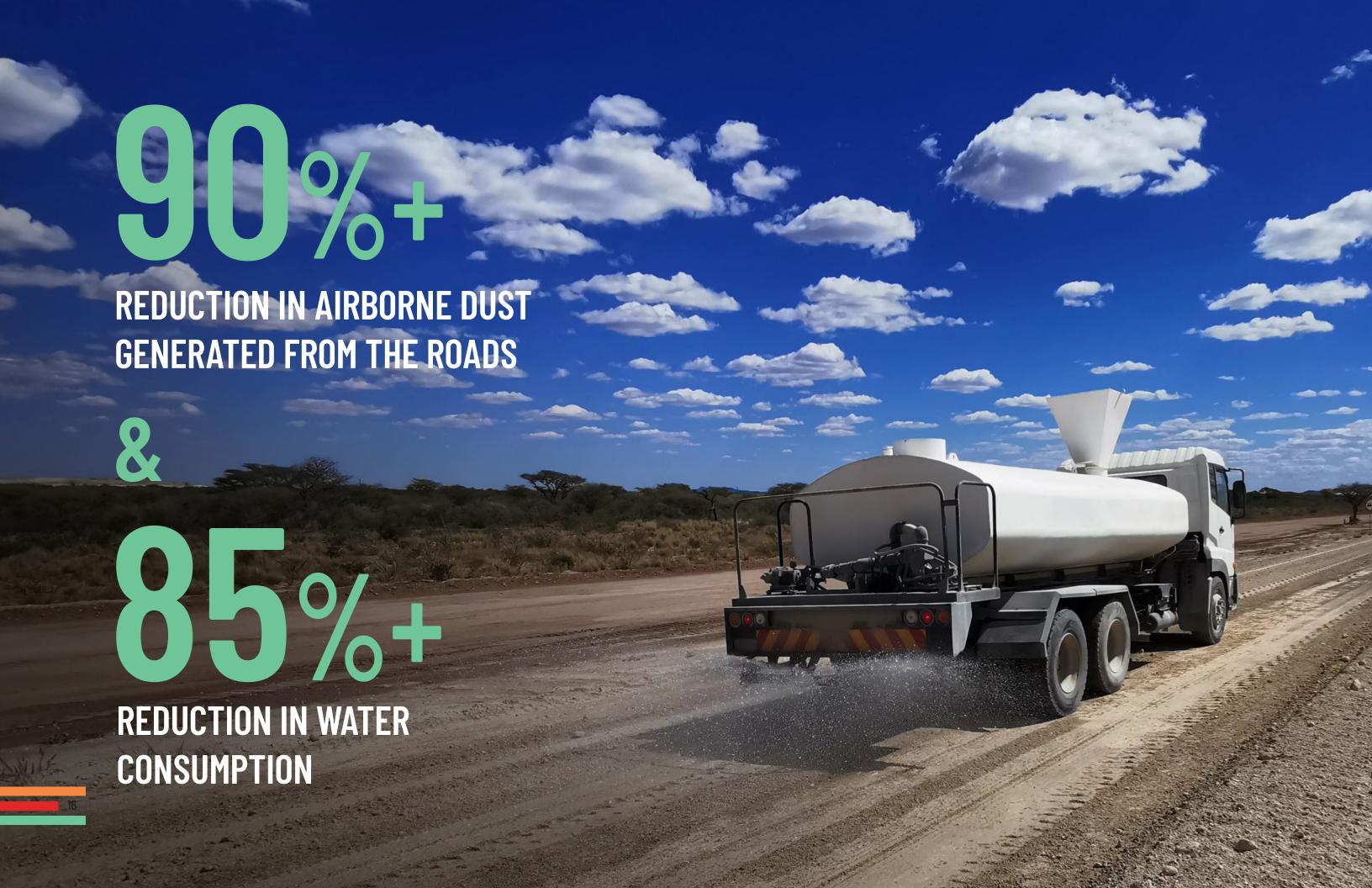
INCREASED CBR (CALIFORNIA BEARING RATIO) VALUE RESULTING IN REDUCED ROLLING RESISTANCE

- · Better fuel economy
- Improved productivity
- Applicable using standard road building equipment & techniques.

Environmentally Friendly, Non-Toxic & Non-Corrosive

Better Bottom Line.





Better Planet.



We are the only highperformance dust control
& soil stabilization
products designed to be
kind to your budget and
our planet.



Cypher Environmental was founded on the basis that we would only develop and promote environmentally friendly products used to solve a variety of common environmental issues (Dust Road Management). The world has embraced our philosophy and solutions in over 50 countries and 7 continents, and with this success our responsibility to give back has naturally developed into a program: Cypher Green RoadsTM.

What is Cypher Green Roads™?

Cypher Green Roads™ was born out of our commitment to Environmental Social Governance (ESG) & Corporate Social Responsibility (CSR) and aims to give back and enhance local roads and infrastructure in the communities in which our products are being used around the world. Through this initiative, we will donate up to 5% of a project value for any orders exceeding \$250K USD in the form of product to a local community, near the project location. For our valued partners who's project sizes do not exceed \$250K USD, not to worry! We donate 12% of our profits annually to charity, meaning every investment in a Cypher product goes towards charitable donations.

Cypher Environmental is a leading global environmental solution provider for dust control and road stabilization. With ESG (Environmental Social Governance) and CSR (Corporate Social Responsibility) principles at the core of every decision we make, we proudly boast the tag line, "Always do what's right."

Want to participate?

Contact us if you're interested in learning more about Cypher Green Roads™: (877) 776-1585 // sales@cypherenvironmental.com // cypherenvironmental.com



Happy Clients

Our products are the best, but don't take our word for it.

The product stands up to the elements. Period.

DUST/BLOKR® exhibited
excellent properties
during and after rain. It
stood up to the elements
very well, with several
periods of rain and hot,
dry and windy weather.
We look forward to
future projects.

~ Steve Robin, Terminal Manager, Pinnacle

It's a lot smoother and easier to travel on – similar to driving on pavement.

~ Angus Munro, Syncrude

85%

Water savings after DUST/BLOKR[®] was applied.

3.6 Million USD in fuel savings in one year.

~Shenhua Beidian Shengli Energy Co.

Faster haul speed and more productivity.

To date, the road has gone through full rainy and dry seasons and is performing very well. The dust is almost completely gone, resulting in faster haul speeds and more productivity in the dry season. During the rainy season we have seen much less rutting and deformation due to the rain, allowing for increased productivity in the rainy season as well, and lower cost to maintain the road.

~ Chen Jingwei, Project Leader at SMB

AÉROPORTS DE **M**NTRÉAL

Long lasting results.

Since using Cypher's products, we have had no issues with dust and are happy with its long lasting capabilities, once cured, the product is also insoluble with rain.

~ José Fernandes, Aviation Grounds Supervisor













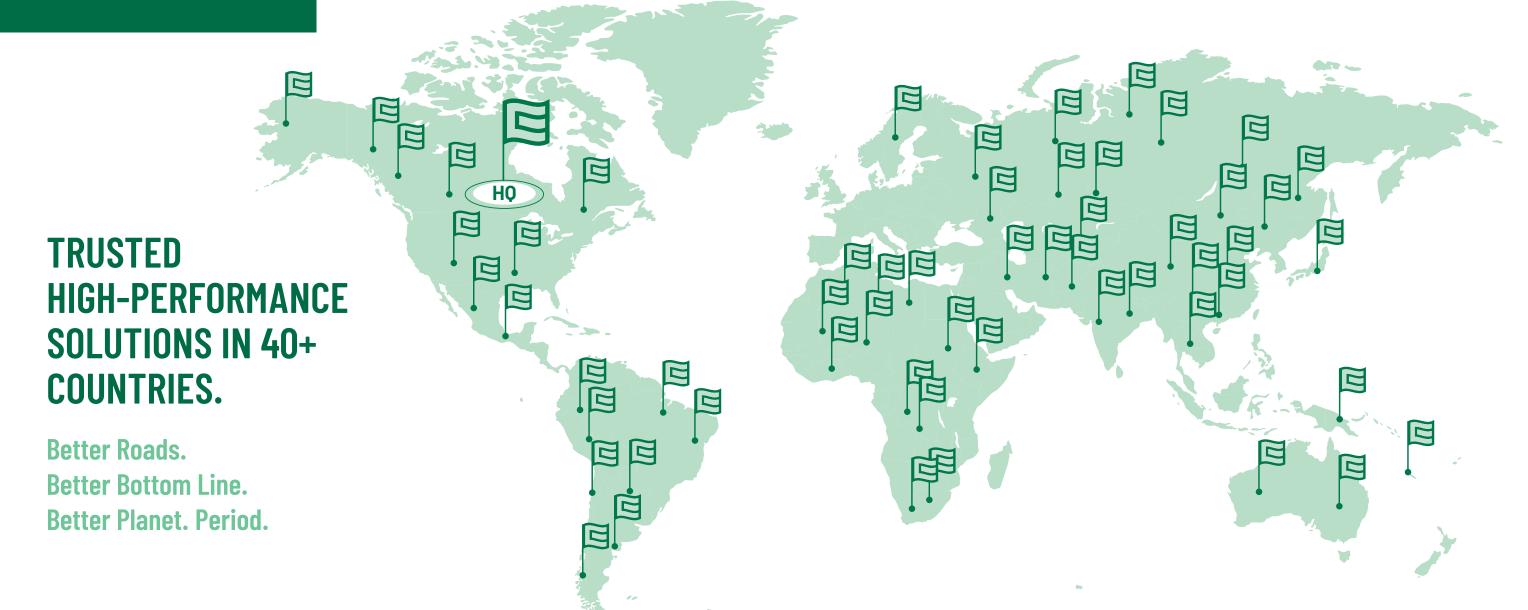








The ONLY high-performance dust control & soil stabilization products with ZERO environmental impact.



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Our Products Are Engineered For Success.

Our products are engineered with surgical precision for consistency and optimal results. Let's face it, a lot of our competitors just use waste materials or by-products from other industries as ready to use dust control or soil stabilization products. We don't! All of our products are proprietary blends of custom designed formulas to get the job done and done right!





We Know Roads.

We are experts in the field and have built lasting roads in over 50 countries on 6 continents. We have successfully complete these projects due to our diverse team of specialists, including engineers, engineering technicians and construction foremen who not only know roads, but know how to make them better using our products!

We Truly Care.





About people, your bottom line and our planet.

Environmental Social Governance (ESG) and Corporate Social Responsibility (CSR) are at the core foundation of every decision we make. This foundation impacts how we give back through philanthropic engagements, treat our team members and stakeholders like family, and incorporate the environment and cost savings into every product we deliver.



We Do Materials Analysis.

We can predict your results and make sure our products are right for your project; before you buy. Our lab can analyze your materials, tell you precisely what's in them and if it's possible to treat them effectively with our products. The bottom line is this: we won't sell to you if we know our products aren't going to work! Did we mention we can also predict what the gain in engineering properties will be?



We Save You Money Now And For Years To Come.

Need we say more?

We Have The World's Best **Onsite Support.**

We come to personally train and support you, no matter where you are. Our products are in use in over 40 countries worldwide, and our support team has been to every one of them! We do not just provide you with a manual on how to build or treat a road with our technologies; we show you exactly how to do it in person!



At Cypher Environmental, our secret sauce is:

OUR PRODUCTS

We are proud to be the innovators of the world's FIRST, BEST & ONLY Dust Control & Soil Stabilization products, engineered to successfully solve common and costly road and infrastructure challenges with ZERO environmental impact.

OUR PROVEN FORMULA Our undeniably innovative and trusted Advantage 360° Formula is designed to reliably deliver our promise through our 6 differentiating pillars.

OUR BRAND PROMISE:

- · Better Roads.
- Better Bottom Line.
- Better Planet. Period.

"Always do what's right."

www.CypherEnvironmental.com





Let's Talk About Bettering Your Roads And Your Bottom Line.



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Always do what's right.