

#SustainabilitySimplified



Synavax™

Sustainability Series

Ready to put your company's sustainability efforts into high gear? Read on for our original 8-part Sustainability Series which highlights key components of Corporate Social Responsibility (CSR) goals and how to reach them with patented thermal insulation coatings by Synavax™.



Part 1. Energy Efficiency & Overcoming Challenges to Adoption of New Technology



Dear Sustainable Friend,

In this section of our Sustainability Series by Synavax™ we're going to focus on one of the key components of a corporate sustainability report, energy efficiency. Energy efficiency is a growing policy priority for many organizations around the world, yet many companies are stalled at this important objective due to the lack of infrastructure for finding, vetting, and implementing new technologies.

Determining which new technologies to try, with a goal to specify across all operations, is a critical decision that can yield substantial returns to the bottom line, but the process is unwieldy and often the corporate channels for implementing new technologies are not well-defined, whether in terms of budget or in terms of the approval process. Surprisingly, there are many companies that adopt our product and are thrilled, and yet it is we who inform their counterparts around the world, because the corporate channels for communication for successful sustainable initiatives have yet to be established.

Do you participate in the sustainability planning and implementation programs at your corporation? If so, we can help you be a "Sustainable Hero" in your organization.

We work with companies of all sizes all over the globe that are at various stages in implementing their sustainability programs. Some of the companies that we work with are just starting their sustainability journeys and are striving to implement the most well known and obvious energy efficiency initiatives, such as replacing their light bulbs with energy efficient models, and others have extensive budgets and employ the most sophisticated robotics and automation processes available.

What all of our plant managers have in common is intense time constraints and what we call “hat head”- having the dual responsibilities of running day-to-day operations and the mandate to improve sustainability and lower energy consumption in their focus of control from the production lines, to the power stations, to the actual physical plant itself.

Finding time in a day, week, month or year to research and vet new technologies is a tremendous challenge amidst the intense pressure to keep production lines running and optimized. Often times the only measures that are implemented are the obvious, the known, the tried and true. Although these measures work, they can only go so far to increase the overall energy savings of your operations.

Savvy Managers Know That Sustainability Saves Money

New Technology Is A Top Priority. When New Solutions Are Found, They Are Implemented. Rapidly!



For plant managers, engineers, and the increasingly important dedicated sustainability executives, finding the latest and most advanced technologies to try requires overcoming the trio of challenges surrounding time, money, and risk. Synavax™ energy saving thermal insulation coating technology is a winner on all three fronts:

1. The time commitment for implementing our coatings is F-A-S-T! We are proud of our ability to provide Sustainability Accelerated™. You don't have to shut down your line and our applications can typically be done in H-O-U-R-S. That is hard to beat! Couple those facts with the ability to apply the coatings with your own staff or favorite contractor and the scheduling hassle is reduced to a minimum. Simple. Quick. Those are our calling cards.

2. Our technology is economical. What other initiative can you implement next week and have it paid for in about 6-12 months (as reported by our customers), that will affect your bottom line with a significant cost savings on energy for approximately a decade? Exactly. That's our point. Plus, Synavax™ creates a safe touch surface for equipment operating up to 400 F and improves the temperature of the working environment.

3. Low risk: Potential to save a reported average of 20% energy savings. That average comes not only from the lab, but also real world performance in factories... and you'll often see case studies with higher savings. The math makes sense. Synavax™ solutions are a “no brainer” energy saving dynamo that also prevent corrosion and they do not cause CUI. We heard today from a large power company in Canada that “this is what we have been looking for and exactly what we need. We need you to give us a full plant specification.” Once our customers learn about us, they are ready to get moving quickly so that they can reap the rewards.

We have made it our mission to make the lives of sustainable leaders, in a word, Simple!

We know that we can help the thought leaders and change agents in companies that reach out to us because we understand, after over a decade of providing sustainable solutions, the challenges that our customers face internally in getting a new sustainable solutions adopted.

Even though Synavax™ technology has a proven track record in over 60 countries around the world, we know that many like to do an initial test project in their own plant. So, let's get your energy efficiency project rolling. All we need is four simple things:

1. Let us know what equipment you have: _____
2. The dimensions: _____
3. The operating temperature: _____
4. Your energy cost per MMBTU: _____

We will do a specification and a quote, and we can even include the equipment for applying it. On your end, plug it in, grab a drop cloth and be saving energy in hours.

Now THAT'S Sustainability Accelerated!™

There are substantial rewards to those that take the risk to try new technologies to meet their energy saving sustainable mandates. We work with companies every day that "swing for the fence" in their initiatives and it's very exciting to be a part of their success when they begin to report back to us the following...

1. Saving money in a week,
2. Earning a positive return in about 6-12 months,
3. Realizing their 20% average savings for a decade or more.

What are you waiting for? Let us help you save energy and money now. Visit us at www.synavax.com to contact us about revving up your sustainability.

Part 2. Reducing Waste with Corrosion & CUI Prevention



In this section we're going to focus on another key component of a corporate sustainability report and discuss how corrosion prevention technology can help.

While anti-corrosion isn't typically the first consideration when checking the list of corporate sustainability goals, it fits right into a key category - Waste Reduction.

Reducing waste lowers costs not only for disposal of corroded equipment but also the money a company has to pay to replace that equipment. While a small section of steam pipe might not seem like a lot to replace, imagine a huge, 20 foot high processing tank being rusted and needing replacement, suddenly costs go up considerably, not to mention the need to dispose of the old equipment according to specific guidelines.

Synavax™ coatings, while purchased most for their powerful energy saving benefits, are a concentrated, multipurpose technology that also prevents corrosion and corrosion under insulation (CUI). The insulating component we use is highly moisture repellent, which allows our coatings to offer excellent anti-corrosion properties.

Some key ways that Synavax Coatings Can Contribute to your Waste Reduction Goals:

- **Preserve metals assets to reduce waste and the energy required to make new items.**
- **Aid in the refurbishing and reuse of tanks, pipes and other equipment.**
- **Prevent waste by enabling the recycling of rusted metal items.**

To give you an example of a sustainable corporation that takes waste reduction seriously, let's take a look at Walmart. They have a goal of achieving zero waste across their global operations. A lofty goal like this is achievable through reuse, recycling and repurposing, and also by making sure that your structures and equipment last as long as possible.

Engineered to Solve Corrosion Under Insulation (CUI)

Syanvax™ coatings go where no coating has gone before! Solving your most difficult issues.



That's more than one CSR goal checked off so far (energy, waste) with one amazing technology! And there's more to come...

Stay tuned for our next segment in our Sustainability Series, and if you'd like to know what our technology can do for you to help you reduce waste and achieve other sustainability goals, just visit our site and contact us by chat, phone, or email.

Nanocoatings that are Water-Based and Water Repellent

When people see first hand the outstanding anti-corrosion properties of our Heat Shield™ line of insulation coatings, they can't believe the technology is water-based. That's advanced technology in action!

Just take a look at this field test that we did for a large metals manufacturer. This brand new ductile iron pipe was coated on one side with our Heat Shield™ Translucent PT coating, scored and then submerged in the Gulf of Mexico for a 30-day real world trial.

You can see in the photo above that after 30-days the uncoated area is already showing signs of corrosion while the side coated with our PT coating is pristine, and does not even have any creep or corrosion infiltration at the score marked areas.

I've been through many a factory with pipes both indoor and outdoor corroding due to substandard insulation. Those factories can both save money from replacement cost and reduce accidents from pipe bursts by protecting their equipment with Synavax™ coatings in addition to meeting their corporate sustainability goals for waste reduction.

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That's more than one CSR goal checked off! (energy efficiency + waste reduction) with one amazing technology! And there's more to come...

Read on for our next segment in our Sustainability Series.

Part 3. Reducing Carbon Emissions While Saving Energy



Reduce Carbon & GHG Emissions



In this segment of our Sustainability Series by Synavax™ we're going to focus on a third key area of a corporate sustainability report (CSR), reducing carbon/CO₂/greenhouse gas emissions.

The reduction of carbon and greenhouse gas (GHG) emissions is often the shining star of a CSR because it's directly tied to a sustainable planet. Less emissions means less negative impact on the earth and its resources. This is why you'll often see this sustainability goal proudly highlighted.

In this arena, we are an expert. We help our clients meet those goals every day.

Did you know that a simple project with Synavax™ thermal insulation coatings can equate to a reduction of 162 metric tons of GHG emissions annually? Read more to learn how...

Hospital Steam Pipe Insulation Study

Our Heat Shield™ High Heat was used at a large hospital for steam pipe insulation. The application used an 8-coat coverage, which is approximately 8/1000'ths of an inch thickness and provided approximately a 110F (61C) temperature reduction, lowering the surface temperature from 302F (150C) to 192F (88.9C) degrees. Quite an accomplishment for a thin film coating, but that's the magic of nanoscience and next generation insulation products.

- **Annual energy savings of 3,046.20 MMBtu/year**
- **Based on today's energy dollars, that's \$8,285.66 USD/year savings on liquid natural gas**
- **Reduction of 162 Metric Tons of GHG emissions, according to the U.S. EPA's greenhouse gas (GHG) emissions equivalency calculator**
- **Equivalent savings of 376 barrels of oil per year**
- **The equivalent of carbon sequestered by 4,141 tree seedlings grown for 10 years.**

**Sustainability is no longer just a buzzword.
It's a business necessity.**



World leaders have joined together to make a substantially increased commitment to sustainable measures, as seen last fall at COP21 in Paris.

We see this translating into companies not just talking about sustainability, but also funding it, prioritizing it, or mandating it... and also incentivizing their employees based upon sustainable metrics.

Our company has been providing leading edge nano-engineered sustainable solutions around the globe for over a decade and has been a champion in the sustainability movement, helping organizations meet carbon reduction goals.

**Reducing energy consumption is directly related to
lowering carbon emissions.**

According to the U.S. Energy Information Administration (EIA), the key U.S. energy-related carbon dioxide emissions sources are:

- Coal
- Natural Gas
- Petroleum
- Electricity
- Other combustion waste materials

There's a direct connection between energy use and carbon, or CO₂, emissions.

Did you know?

Fossil fuels supply 82% of the primary energy consumed in the United States and are responsible for 94% of total carbon dioxide emissions. (Source: EIA)

Some Key Ways that Synavax™ Coatings Can Contribute to Your Carbon and GHG Emission Reduction Goals:

- Insulate boilers, steam pipes, and other heat process equipment to reduce LNG, oil, and coal use
- Reduce the overall carbon footprint of manufactured goods by using less energy to manufacture them
- Easily insulate building walls and roofs to lower electricity used for heating and cooling and related carbon and GHG emissions.
- All our insulation coatings are low VOC, so using them won't negatively contribute to additional emissions into the atmosphere

The year has just begun, and you can get an easy head start on any CO₂ and GHG reduction goals just by insulating equipment or buildings with innovative Synavax™ thermal insulation coatings.

Isn't it amazing that one simple coating technology can help you meet multiple sustainability goals?

Here's a secret... that's how we engineered them! That's Sustainability Accelerated™ and Sustainability Simplified™... It's our promise to you with every product we make.

We have made it our mission to make the lives of Sustainable Leaders, in a word, Simple!

Here are a few examples of companies we applaud for their ambitious carbon reduction goals:

- General Mills, Goal to reduce GHG emissions by 28% by 2025
- Pepsico, Goal to reduce GHG emissions by 20% by 2030
- International Paper, Goal to reduce GHG emissions by 20% by 2020

Does your organization have target goals for reducing carbon or GHG emissions? If you do, we can help make it happen!

As you're sitting down considering the options for saving energy and reducing carbon and GHG emissions, it's important to note that the US Energy Department recommends insulation as the #1 energy saving project you can undertake. Reducing energy costs by 20% (the average reported by Synavax™ industrial clients) correlates to a 20% reduction in related GHG emissions. And with a reported ROI of only 6-18 months... That's an easy decision!

Read on for our next segment in our Sustainability Series.

Part 4. Improve Safety, Health, and Infrastructure



In this week's Sustainability Series by Synavax™ we're going to focus on mold and mildew resistance, which factors into a few different areas of overall sustainability.

Mold can come in a variety of forms, but all can pose a hazard to the health and safety of employees, products, infrastructure, and ongoing maintenance. Not only is mold on roofs or building exteriors unsightly and can cost thousands in maintenance and cleaning costs per year, if it collects in ductwork or areas where food or beverages are processed, stored, or sold, it can cause a host of many dangerous health issues.

While there are some non-insulating mold resistant coatings on the market, many of them contain potentially hazardous moldicides, which can be a problem unto themselves. Typically these types of coatings cannot be applied to insulation. Older forms of insulation can harbor mold as soon as they are subject to any moisture.

We've all heard about Sick Building Syndrome, which can be caused when mold or mildew grows on HVAC ductwork or the insulation that is wrapped around it.

**Sustainability is no longer just a buzzword.
It's a business & safety necessity.**

Molds can be found almost anywhere; they can grow on virtually any organic substance, as long as moisture and oxygen are present. There are molds that can grow on wood, paper, carpet, foods, and insulation. When too much moisture accumulates in buildings or on building materials, mold growth will often occur, particularly if the moisture problem remains undiscovered or unaddressed.

The health and safety of employees and building infrastructure is of the utmost importance and a key area of concern for many organizations and their environmental and health administrators.

Synavax™ Energy Protect™ thermal insulation coating is a solution that can solve mold and mildew issues in a water-based, environmentally friendly formulation, that does not contain any moldicides.

Synavax™ technology may be known for its powerful energy saving insulation, but it's made to do so much more. One of the unique benefits of our coatings is that they are mold and mildew resistant... naturally. The makeup of our technology is hydrophobic, or water repelling, so there is not enough moisture in the coating surface to support mold growth.

Uses for health and safety are numerous, and include providing mold/mildew resistance for:

- Walls
- Ceilings
- Roofs
- HVAC Ductwork
- Food Processing Facilities
- Wineries
- Hospitals
- Nursing Homes
- Older Buildings with Old Insulation
- Stairwells
- Exterior Structures



Synavax™ Energy Protect™ Helps Hyundai Prevent Condensation and Mold

The Hyundai corporate housing in Seoul, Korea was experiencing an unhealthy issue with condensation collecting in the stairwells, which were not well insulated. This moisture collecting on the walls and ceilings caused mold to grow. Energy Protect™ coating was used to coat and insulate both areas, which solved this critical issue by providing both insulation to prevent condensation and mold resistance in a single product.

We have made it our mission to make the lives of Sustainable Leaders, in a word, Simple!

Synavax™ Energy Protect™ A Powerful Mold Prevention Solution

Molds gradually destroy the things they grow on. By controlling moisture and eliminating mold growth with Energy Protect™ coating you can:

- Prevent damage to building materials and furnishings
- Save money
- Avoid potential health risks

Energy Protect™ is a clear coating with a matte finish that provides a powerful protective shield for any building or HVAC surfaces. Prevent mold, save energy, protect from UV, and prevent corrosion all with this one nano-engineered technology.

Let us help you solve issues with condensation, mold, and mildew now. Visit our www.synavax.com to contact us about revving up your sustainability.

Part 5. Reduce Injury Rates by Insulating to Safe Touch



In this next section we're going to focus on another key area that is highlighted in nearly every Corporate Sustainability Report (CSR), which is Employee Health & Safety.

Reducing injury rates and lost time on the job due to injuries is of huge importance to organizations. They want to ensure their employees stay healthy and happy and productive. They also want to keep their Worker's Compensation expenses and related insurance premiums as low as possible. That's why Employee Health & Safety receives its own section on CSRs and is one of the top sustainability goal categories for many organizations globally.

One way to reduce employee injuries is to ensure all surfaces in the working environment are safe-to-touch so no one gets burned. While there is no specific OSHA guideline on the temperature considered "safe-to-touch," it is widely recognized in factories around the world as 140F/60C.

The nearest guidelines found by OSHA on the subject are as follows:

1910.261(k)(11):

Steam and hot-water pipes. All exposed steam and hot-water pipes within 7 feet of the floor or working platform or within 15 inches measured horizontally from stairways, ramps, or fixed ladders shall be covered with an insulating material, or guarded in such manner as to prevent contact.

1910.262(c)(9):

Steam pipes. All pipes carrying steam or hot water for process or servicing machinery, when exposed to contact and located within seven feet of the floor or working platform shall be covered with a heat-insulating material, or otherwise properly guarded.

OSHA increased their penalties for violations in 2016. You can read more about that at: <http://www.synavax.com/5-4-3-2-1-osh-penalties-just-increased/>.

**Synavax™ coatings keep heat where it belongs.
Keeping your business running safely and sustainably.**

Synavax™ insulating coating technology allows hot surfaces to be quickly and easily brought to a safe touch level just by spraying on the recommended number of coats, which can be done while the equipment is in operation. If sprayed onto a hot surface, the Heat Shield™ EPX-H2O coating will dry in just a few hours and lower the surface temperature significantly.



How Much Can Synavax™ Heat Shield™ EPX-H2O Reduce A Hot Surface?

In this case study which was done on the boiler of a major hospital, just 6-coats of EPX-H2O were applied to the boiler exterior, reducing the surface from a too hot to touch, 230F/110C down to the safe touch level of 136F/57.8C for a total reduction of over 40%, or -94F/-52.2C.

Three Important Employee Health & Safety Benefits Related to Temperature

Our line of Heat Shield™ coatings were aptly named. These thermal barrier coatings keep heat where it needs to be not only to reduce energy costs, but provide a number of employee health and safety benefits:

1. **Safe Touch/OSHA:** Our insulating coatings are used widely to lower hot pipes, tanks, ovens, steam pipes, boilers and other hot equipment surfaces to a non-burning, safe-to-touch level.
2. **Improve Hot Working Conditions:** Many factory environments can get extremely hot, especially in the summer, making the environment unhealthy for workers. Our insulating coatings reduce the heat radiated into the working environment by heat process equipment to reduce the chance of heat stroke and lower air conditioning costs too.

3. **Keep Handrails from Heating Up:** Exterior structures like handrails, benches, and playground equipment can get extremely hot when the summer sun beats down. Our Heat Shield™ Translucent PT coating provides the perfect solution, with a smooth, clear, matte finish to keep surfaces cooler.

We have made it our mission to make the lives of Sustainable Leaders, in a word, Simple!

How easy is Synavax™ Heat Shield™ EPX-H2O to apply? Check it out for yourself (Hint: Pretty easy!)



<https://www.youtube.com/watch?v=FolHciWQUK8>

Let us help you solve issues with too hot surfaces now. We can let you know just how much to use to get your surface to a safe to touch temperature. Contact us today.

Part 6. Easy Application Means Faster Project Payback



Easy Application
for Faster
Project Payback



In this section of our CSR Series, we are going to touch on something that is applicable to both industrial and building insulation and energy saving projects. A major consideration when evaluating sustainable technology is the installation or application cost, not just the material cost.

When installing some types of energy efficiency technologies, the labor cost to install can be a big chunk of the total project expense. For example, according to homewyse.com the typical labor cost for installation of mineral wool insulation can be more than 50% of the total project cost.

And when it comes to fiberglass and cladding, or aluminum jacketing, costs to install the cladding, banding, and screws over the fibrous material not only mean high labor cost but also downtime during the installation process. Downtime can cost factories hundreds of thousands of dollars a day in lost production time.



Apply with no downtime

This is another important reason that Synavax™ thermal insulation coatings are becoming the main technology that factories look to first for insulating tanks, pipes, and other equipment. They are easily installed with a standard paint or texture sprayer and can be applied in most cases while the equipment is in service. The application is also easy enough for an organization's own maintenance crew to do.

Easy application is one of the factors in our exceptionally short payback periods both for equipment and building insulation projects. Industrial customers report 6-18 months payback and building customers report 3-5 years payback. Both of those are much shorter than the standard payback of other factory or building energy efficiency technologies.

Of course, other benefits are that they prevent corrosion instead of causing it, like other insulations do, and the moisture resistance and 10 year+ longevity with consistent insulating performance throughout their lifespan.

How Easy Are Synavax™ Insulating Paints To Apply?

When we say "as easy as painting" we mean it. All of our insulating coatings can be sprayed on easily, with some also having the ability to be brushed or rolled. There is no cladding to affix and screw into place, which greatly reduces the labor cost and time to install.

The film thickness can easily be checked with a wet film thickness gauge while applying (see PT video below), or a dry film thickness gauge after the film is completely dry.

Just Spray On and You're Done!
That's Synavax™ Sustainability Simplified™

Visit this link to see our application & product videos: <http://www.synavax.com/synavax-thermal-insulation-coating-videos/>

Recommended Equipment Needed

You don't have to buy expensive equipment to apply our products, and in many cases a contractor or your maintenance manager will already have what they need.

Click for equipment suggestions with direct links to sprayers and more: <http://www.synavax.com/easy-application-insulation-csr-series/#equipment>

You Have Your Own Technical Team With Our Gold Standard Application Support

We know that a proper installation is vital to the success of any project. We are there with you every step of the way with personalized, complimentary webinar training, technical documentation, and technical support available by email, phone, and video call before and during your day of application.

Our Gold Standard Project Promise

Our food processing insulation products for equipment give you tremendous potential to save energy and protect your assets. We will help you create your personalized Sustainability Simplified™ Plan.

Gold Level Custom Project Plan

– Your Sustainability Simplified Advisor

You will have your own dedicated personal to help you define your optimal Sustainability Simplified™ plan based on your goals.

+ Webex Team Conference Call

+ Personalized Application Guide

+ On Call Application Support

Platinum Level Fee-Based Selections

+ Equipment Rental: DFT Meter

– On-Site Application Training

We can provide on-site training for your team. Alternatively, we offer the option to assemble key personnel from various multi-national regions for global rollouts. Once leading company completed a world-wide adoption in 35 factories and 26 countries with in-house personnel in one year. Their bold actions produced bold results! Dream big!

+ Turn-Key Solution

Summing Up Why Easy Application Means Faster Payback

There are a number of reasons you'll get a faster payback on your entire project with Synavax™ easy application coatings:

- No downtime for factory
- Shorter installation time
- No cladding, banding, or screws to buy
- Prevents corrosion, less maintenance costs
- No expensive equipment to purchase
- Application can be done by painting contractor or your own maintenance crew
- Outstanding Gold Standard Support is complimentary

Would you like a 20-30 minute installation overview? Just contact us today and we'll get that scheduled and show you just what we mean by "Easy Application" and Sustainability Simplified™!

Part 7. Increase Asset Lifespan with Synavax™ Protective Coatings



In this this section of our CSR Series, we talk about the importance of protective coatings, like the ones manufactured by Synavax™, to increase asset lifespan. This is an area where our technology really stands out because it lengthens lifespan rather than shortens it.

A big drawback of using older methods of insulation, like fiberglass or mineral wool, is that they actually can cause corrosion under insulation (CUI) and shorten the designed lifespan of pipes, tanks and other critical equipment.

Synavax™ thermal insulation and asset protection coatings do the opposite, they prevent corrosion due to their hydrophobic nature, plus offer UV, mold, chemical, and moisture resistant benefits. This means that the operational asset life of equipment is not only preserved but can also be increased in many cases.

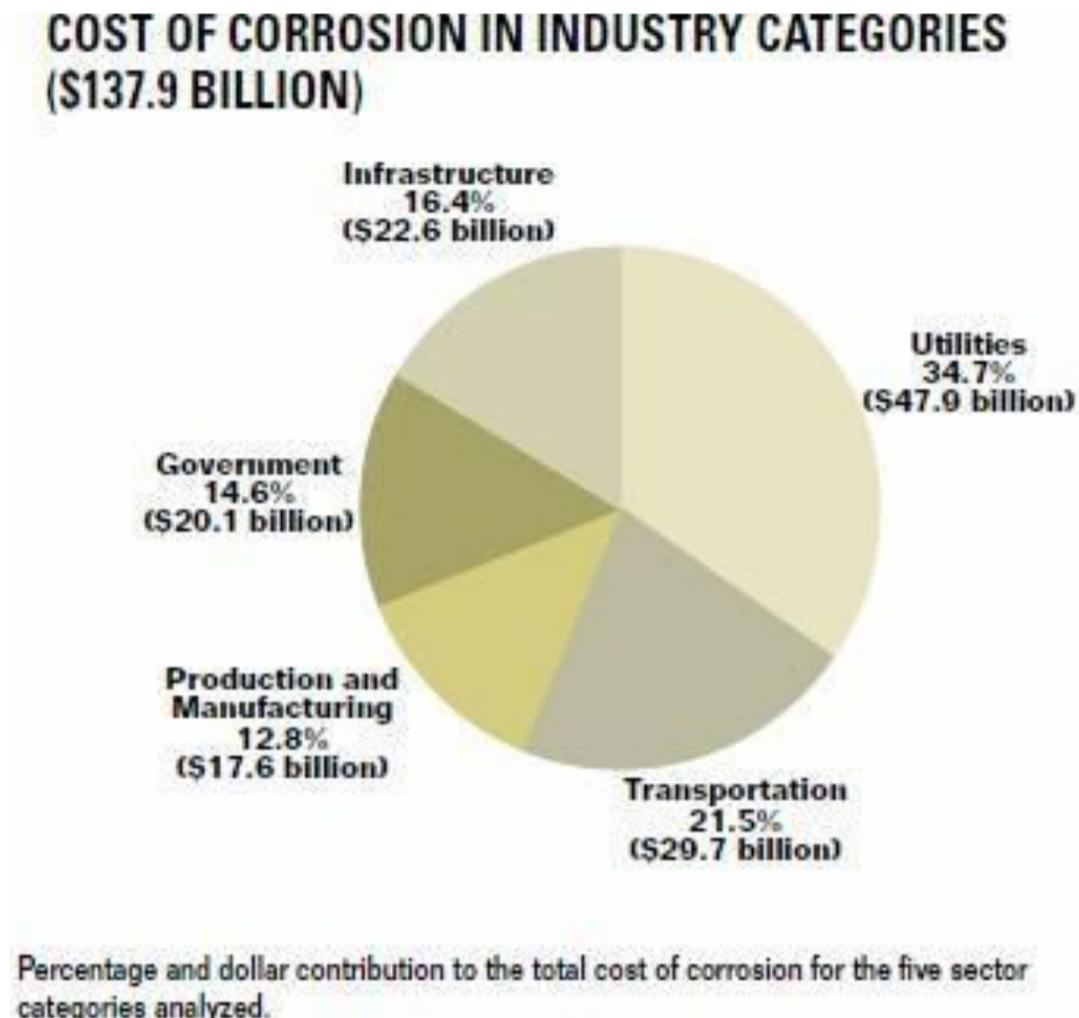
To give you an idea of the cost of using the wrong insulation materials that can shorten equipment life, here are a few statistics:

In a study in the oil and gas industry, one company found that in five domestic refineries, 36% of the total maintenance budget was due to corrosion. For production operations onshore, corrosion was responsible for 28% of maintenance costs, and in offshore applications it accounted for a whopping 60-70% of maintenance costs.

According to EnergySkeptic, the cost of corrosion hits multiple industries. Large ships that can be up to 80 times more energy efficient than truck transport, typically only last about 29 years on average due to accelerating corrosion.

Imagine adding even 5 or 10 years to that lifespan by insulating with a product that also controls corrosion without adding weight or taking up valuable space onboard the ship. That's a multi-million dollar cost savings difference!

Looking to other industrial areas, corrosion, including the resulting depreciation of asset lifespan, account for \$137.9 billion in costs per year.



Making the Case for Synavax™ Products for Increased Asset Lifespan

Most plant and facility managers understand the costs of decreased asset life and the maintenance dollars needed to clean up corrosion caused by fibrous insulations and to replace insulation deteriorated due to moisture, compression, dirt, and other contaminants. Not to mention the energy dollars lost as the performance degrades over time.

So, why are so many timid about trying a nano-engineered, thermal insulation coating that solves all that and maintains consistent insulating performance?

Objection: It's new, and I've never used it.

Answer: The technology has actually been performing successfully in multiple industries and commercial building application around the world since 2004.

Check out our global case studies here: <http://www.synavax.com/synavax-industrial-manufacturing-case-studies/>

Objection: There's no testing or R-value.

Answer: False. Synavax™ coatings have been tested extensively by several independent laboratories for thermal, corrosion, mold, UV, and other performance benefits. No thin film coating can have an R-value, not because it doesn't insulate, but because the R-value was specifically designed by the fiberglass insulation industry for their product.

We have several independent tests that show reduction of heat transfer, and we even go the extra mile with testing at freezing (0C/32F), we challenge you to find that with other insulation manufacturers.

Outstanding 3rd Party Testing Results:

- 34.8% reduction in heat transfer, 3-coats
- 24 cycles passed of accelerated salt fog corrosion test, no rust
- Mold and bacteria resistance testing, passed
- 80% UV resistance as tested over pane glass
- British Petroleum testing for resistance to CUI and Thermal Conductivity in a salt spray environment, passed with no flaking, loss of adhesion, or performance.
- Reduction in thermal conductivity over glass at freezing temperatures, 10% at 4-coats, 30% at 8-coats
- ...and the list goes on (see our website for details)

Objection: It will cost more.

Answer: When you consider the elimination of exterior jacketing, extra installation labor, and the 10-year warranty, this just isn't the case. Our technology is very competitive with other older forms of insulation. Our coatings can also be applied while equipment is in service, with a simple spray-on application. No special equipment or contractor needed. The typical payback reported in industrial applications is 6-18 months.

See this comparison (<http://www.synavax.com/wp-content/uploads/2017/02/Synavax-Product-Comparison.png>) based upon an offshore fuel oil storage tank where 12 coats of our Heat Shield™ High Heat coating successfully replaced 8cm of rockwool with cladding. The coating lasted much longer while also helping improve the asset lifespan of the tank by preventing corrosion damage.

So, if you're ready to upgrade to the next generation of insulation that not only saves energy and lowers surfaces to a safe touch, but also has multiple protective benefits to increase asset lifespan, contact us today for a no obligation specification and quote.

Sustainability has never been easier and a technology has never made more sense to start using now!



Part 8. Protect Surfaces from UV Fading and Damage



Easily Protect
Surfaces from
UV Fading & Damage

In this this section of our CSR Series, we are going to take a look at the damaging impact of harmful UV rays and how to stop them from fading and destroying structures and building exteriors.

Most people understand the damage that UV radiation causes to painted surfaces and vinyl siding. The UV causes fading over time, and often other issues like cracking and peeling of exterior paints. Many commercial property owners have to repaint or replace exterior building elements due to the damaging effects of UV rays far before their functional lifespan is up.

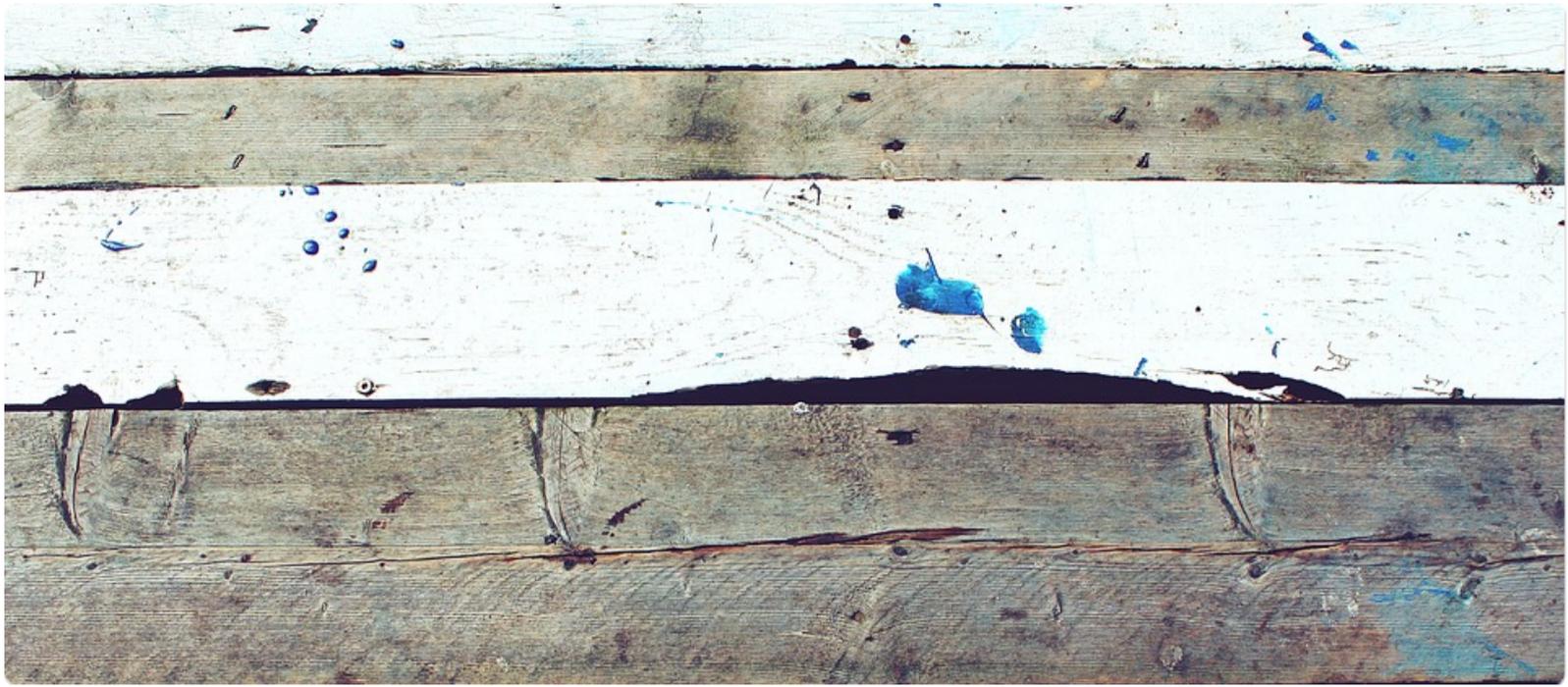
But did you know UV rays can also be detrimental to steel buildings and structures?

According to Armstrong Steel Building Systems, "The sun and its UV rays are the biggest threat to your metal roof and if you put a dark colored roof on your building, you could be unknowingly contributing to its negative health. Dark colors absorb the sun's UV rays and could cause your roof to weaken and split. This weakness could eventually cause leaks in your building."

The right insulation coating, like Synavax™ Translucent PT (for metal) or Energy Protect™ (for non-metal) can not only save energy and reduce the heat gain from the sun, it can also provide important protection from UV caused degradation and color fading.

Synavax™ thermal insulation coatings have a special built-in component that reduces the impact of harmful UV rays. The technology has been tested over glass and was shown to reduce UV transmission by 80%, while still allowing through 90-92% of the visible light to shine through.

Our coatings have also been tested in UV aging cabinets, passing the 10-year equivalent with no discoloration or yellowing and no loss of adhesion. We keep UV away and keep your surfaces protected.



The Costly Effects of Weathering

According to FEMA, the combined effects of both sun (UV rays) and water on building materials are multiple, unless they are protected from it. UV and Weathering can cause:

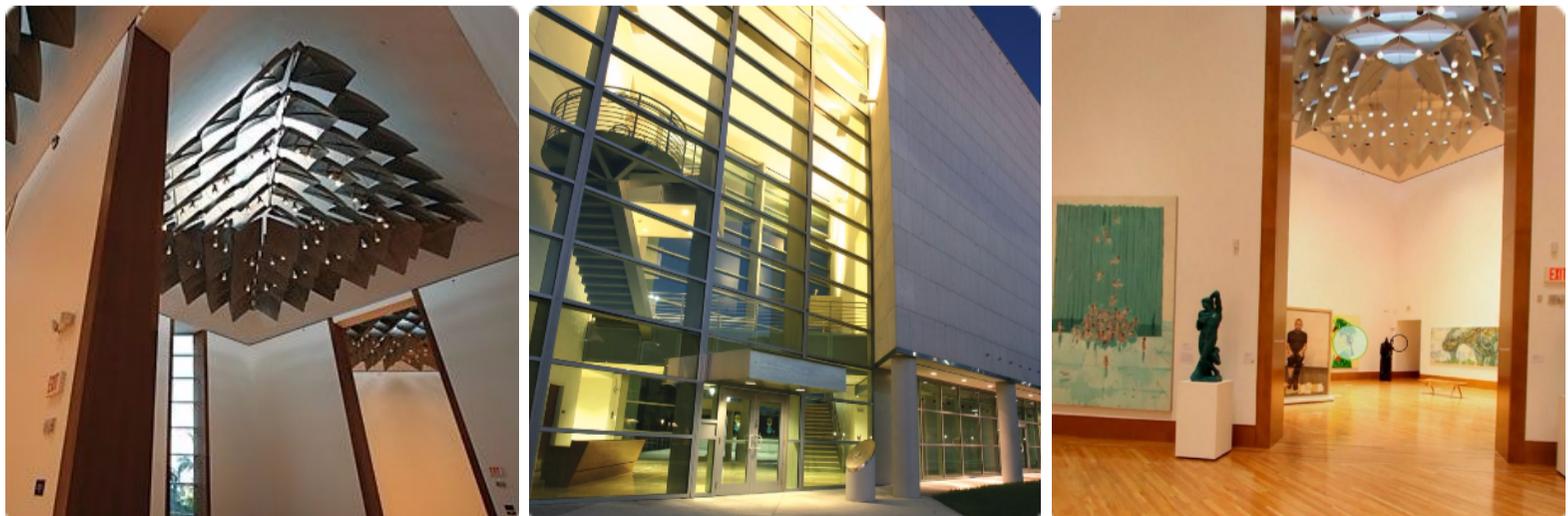
- Fading of finishes
- Accelerated checking and splitting of wood
- Gradual loss of thickness of wood
- Degradation of physical properties (e.g., embrittlement of asphalt shingles)

The effects of weathering reduce the life of building materials. Even finishes intended to protect exterior materials fade in the sun, sometimes in only a few years, if they're not protected with a technology like Synavax™ coatings.

UV Can Impact the Interior Too

And UV doesn't only impact the exterior of a building or structure. UV rays streaming through skylights or windows can cause fading and damage of internal materials as well (carpets, furniture, artwork), not to mention increased heat inside a home or building.

Case In Point - Frost Art Museum



Synavax™ was contacted many years ago to provide a sustainable solution for the Frost Art Museum in Miami, Florida.

The museum was designed with beautiful skylights to let in natural light, however the UV rays penetrating those skylights were causing damage to the priceless works of art inside.

Our Energy Protect™ thermal insulation coating provided them with a perfect solution to coat the skylights and still enjoy the natural light, while greatly reducing the damaging UV rays and protecting the art inside. The coating also insulated the skylights, lowering energy costs.

Multi Purpose Technology

Synavax™ coatings were designed to address multiple issues in a single product, which is why they have no comparison on the market. Some products insulate, some products provide weathering resistance, and some provide mold resistance...

But our coatings do that in a single product!

Multi-benefit, multi-cost savings. That's Brilliant!

If you'd like to learn more about our solutions for UV and weathering resistance, give us a call or email us anytime. Let us give you the benefits that many customers report back to us that they enjoy... 20%-40% on energy costs PLUS lower maintenance and replacement costs for building materials.

UV can cause irreparable damage to more than just your skin - Contact us today for a clear coat solution!

Our Promise To You...

**With Synavax™ Sustainability Simplified™ Technology
We'll Make Your Sustainability Accelerated™**



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