4 Ways to Improve Sustainable Construction

J.T Grindheim

FONN

It's no secret that modern construction has problematic effects on the environment.

Millions of tonnes of construction and demolition waste goes directly into landfills.

According to the BBC, about a third of the world's waste comes from construction, and almost 40% of global fuel emissions come directly from work done in the construction industry (2021). Clearly, we as builders, have an immense responsibility to try to mitigate this negative environmental impact as best we can.

But the question is: how can we build responsibly and effectively? Changing the ways of an age-old, enormous global industry is no mean feat.

The State of the
Construction Industry

Today, the construction industry employs almost 7% of the world's working-age population— that means that close to 280 million people make their livelihoods in construction.

However, for such a large global industry, construction has a major productivity problem. Most builders and developers are still married to old, outdated technology and processes that are ineffective, slow, and wasteful.

Less than 25% of firms in the construction industry today match the productivity growth of the overall economy.

This is a huge problem, both environmentally and financially speaking. According to the EPA, in 2018 alone, an estimated 13.2 billion USD was spent on rework in the US due to mistakes as a result of inadequate data and information.

By working to solve the massive, ever-growing environmental problem of construction waste, our industry stands to take back these billions of dollars that we've been leaving on the table each year.

Even if all you've ever built is a remodel on your own house, you know that in construction, reliable processes that crews can depend on are crucial to any project's success.

While this unwavering commitment to what works is certainly commendable, this attitude also keeps construction crews reliant on processes that are inefficient, time-consuming, and ultimately wasteful.

Here are just a few ways that using construction project management software like Fonn on your worksite can help you and your team tackle the overwhelming problem of sustainability in construction and increase your team's productivity (and profitability) in the process.

1 Improve worksite workflows to **reduce** errors and **rework**

When construction workflows on a jobsite break down, or when miscommunications happen between different teams, errors are made. Errors lead to rework, one of the most dreaded (and expensive!) parts of any construction project, no matter how large or small.

Rework is not only a pain in terms of logistics, planning, and building timelines—it is also one of the biggest causes of waste on construction sites. Rework requires your team to double back and completely undo the work they've already done, all because communication failed at some point along the line.

Obviously, rework is incredibly frustrating, but it also leads to overconsumption of building materials at an enormous scale, with negative environmental impacts from the production, transport, and disposal of these materials.

By providing ready access to up-to-date information, Fonn helps to reduce the number of building mistakes, which in turn reduces the amount of materials used. In addition to the positive effects this has on the environment, Fonn estimates that total construction costs can be cut by around 18% per project based on its own numbers.

McKinsey concludes the same in its 2017 report, Reinventing Construction.

Fonn estimates that construction costs can be cut by around

18%*

*Using figures highlighted in McKinsey Report, 2017

2

Use communication tools to decrease fuel emissions

Another huge way that construction projects cause environmental damage comes from the fuel emissions produced by the industrial equipment needed to build.

Not only do these emissions add to the growing environmental crisis of climate change, depending on how old your team's equipment is, these emissions could have negative effects on your contractors' and builders' health from over-exposure.

Reducing the net amount of fuel emissions on a worksite not only helps decrease your company's carbon footprint, but it also helps keep your crew healthy (and your gas costs down—an ever-growing concern in today's economy).

Keeping fuel emissions low isn't just about not letting engines idle—although keeping that to a minimum definitely helps. It's also about cutting down on travel to and from different areas on a worksite.

When your team uses Fonn, not only can crucial conversations happen exactly when they need to happen (with no delay for travel), your team also saves money and time, all while lowering fuel emissions on your site.

Because information flows through digital channels, Fonn significantly reduces the need for transport to and from the construction site for communication purposes. Instead, all parties are able to review plans on the app and make sure everyone has the most up-to- date project details without delay.

"Reducing the net amount of fuel emissions on a worksite also **helps keep your crew healthy**."

3 Harness technology to **eliminate paper wastage**

Needless to say, paper waste generated by keeping construction project management processes in the dark ages can also seriously contribute to a worksite's negative impact on the environment. All of that paperwork not only creates the expensive need for space to store it all —it also contributes in a major way to the overall wastefulness of your construction site.

According to the EPA, in 2018, paper and paperboard materials made up the vast majority of all landfill waste. Among the types of paper found in landfills were office papers. In other words, all those stacks and stacks of paper on your jobsite—change orders, contracts, reports, schedules, and of course, updates and revisions to all of these papers and more—contribute directly to the amount of paper waste in landfills today.

Aside from the negative environmental impact of sticking with old fashioned paperwork, it can also get costly. According to industry research from Gartner, Inc., up to 3% of a business's entire revenue can be spent on paper products, as well as storage and management of these papers. That's money that your team definitely does not need to spend.

More than that, handling all of your construction project's records on physical paper is simply inefficient. With Fonn's secure data management applications, team members and contractors who need the kind of information stored in work orders can access this data in real time, at their fingertips, whenever and wherever the need arises.

Up to

3%

of a business's revenue can be spent on paper

4

Improve **collaboration** on green projects

Last but not least, an important part of reducing the carbon footprint of the construction industry is working to build greener, more sustainable buildings.

Curbed.com does a great job of talking through the different ways that inefficient building design can contribute to a city's overall greenhouse emissions.

Essentially, when a building's design does not actively work to reduce its annual carbon emissions and energy expenditure, then no matter how much work your company has done during construction to mitigate the negative environmental impact of your work, that building will continue to contribute negatively to climate change.

Luckily, there are plenty of green initiatives in the construction industry—the LEED rating system and the EnergyStar program chief among them in the U.S.

However, if your team has no way to collaborate across departments, or in other words, if your contractors and builders can't work in real time with your architects and engineers, fulfilling these green building requirements becomes much more difficult.

Fonn's easy-to-use construction workflows and communications features act as a constant connector between all of the teams on your site, so that your construction project can do more, both for the environment and for your company's overall productivity.

"There are **plenty** of green initiatives in the construction industry"

About Fonn

We created Fonn to address the specific issues that old, reliable, but outdated processes create.

Instead of trying to reinvent the wheel, we've worked to build a construction management software that meets work crews where they're at in terms of how they like to work—and uses advances in tech to make each of these processes a lot simpler, more intuitive, and easier to collaborate on.

The solution consists of both a web app for the office and a mobile app for the field. This gives all contributors access to drawings and plans on smartphones, tablets, and computers. The solution also offers support for BIM models.

Participants can communicate in real time directly in the app to avoid misunderstandings and long lines of communication. All communication is stored for liability protection. Contractors can even send photo or video notes back and forth for the clearest possible communication on the kinds of intricate details that matter on a jobsite.

In short, although construction is one of the largest industries in the world, it has an environmental impact problem, which is, at its core, a productivity problem.

Fonn Construction management software provides all building project participants with easy access to up-to- date information. This improves communication, helping to avoid delays, mistakes, and unnecessary resource use.

Contact our friendly, expert team today to see exactly how Fonn can help your team improve communication, leave less money on the table, and reduce your carbon footprint in every construction project you take on.

Contact

UK
+44 (0)800 520 0164
hello@fonn.co.uk

Norway
+47 94 81 23 12
hello@fonn.io