



ICT LOGISTICS CASE

Heijmans provides insight into CO₂ emission from transport in ICT Incore's Supply Chain Portal

How do we get a grip on the logistics of our projects? Can we easily visualise the CO₂ and nitrogen emission levels related to the transport of building materials? These and other questions prompted Heijmans to implement and extend the Supply Chain Portal developed by ICT Incore, part of the logistics division within ICT Group. Nikki Pije, senior advisor construction logistics at Heijmans, talks about the journey the company took to get here.

From 1 July 2024, all large, listed companies must comply with CSRD, the new European legislation that imposes reporting requirements in the domains of people, environment and climate. However, many years ago construction company Heijmans already wanted to provide insight into the impact of its efforts within this domain. Pije: "Our mission is to create a healthy living environment. That's a very broad theme, and construction logistics is part of it. This primarily concerns CO₂ and nitrogen emission, but it also covers noise and traffic pollution. The great thing is: these aspects go hand-in-hand. Because the fewer the transport movements, the lower the CO₂ and nitrogen emission levels, as well as less traffic and noise pollution for local residents."

Entire chain mapped

As a large contracting company, Heijmans is involved in all kinds of projects, from road and hydraulic engineering to residential and non-residential construction. To reduce emission during those projects, it's not sufficient for Heijmans to map its own emission levels. "We outsource a large part of a project to subcontractors and suppliers, so we want to monitor their emission levels," says Pije. Twelve years ago, Heijmans already started its first project in this area. It involved a self-created planning tool in SharePoint. However, SharePoint is not the right environment for hosting an application and scalability was also a problem. After an intensive selection process, Heijmans opted for ICT Incore's Supply Chain Portal.



Control tower

Pije: "We had several reasons for choosing ICT Incore's Supply Chain Portal. Naturally, its functionality was of prime importance, but our choice was also based on the fact that ICT Incore has a great deal of affinity with logistics processes, especially in industries other than construction. After all, we are familiar with construction ourselves. But I believe we should also take inspiration from other industries."

The Supply Chain Portal acts as a control tower. It contains a huge variety of functionalities, ranging from ordering and arranging the supply of on-call building materials to scheduling deliveries and handling receipts efficiently. The portal also offers functionality for suppliers and transporters. A route map shows drivers how to reach the construction site. They can easily report any delays and they log in via the app when they arrive at the construction site. In addition, receipt registration is also performed via this app.

The Supply Chain Portal is a standard solution, but one that is fully geared to Heijmans' processes. Setting up the tool was an intensive process, but it is an important success factor, says Pije. "All suppliers have an account, regardless of whether they are large parties with whom we collaborate on many projects or small suppliers with whom we enter into a one-off collaboration. Authorisation with roles and rights allows us to determine who sees which information. This means that, depending on your

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role in the organisation, you get to see the exact information you need to perform your work more efficiently."

CO₂-monitoring

New functionality was added to the Supply Chain Portal in 2023, partly in view of the CSRD. This included a tool to monitor emission levels related to transport. Its development was a collaboration between Heijmans, Top Sector Logistics and ICT Incore, says Pije. "We jointly set up what the reporting should look like. To calculate the CO₂ emission levels from transport the Supply Chain Portal uses existing data, which minimises the amount of manual input." One example is the automatic calculation of the driving distance based on the shipping and final location.





Chain-wide insight

At the time of writing this article, the portal's new CO₂ emission functionality hasn't been in use for very long yet. "We are still completing the set of data, but we can already see that we have a lot more insight into the chain," says Pije. "We can see the course of logistics flows, which allows us to plan them better. That way we can avoid peak moments and arrange a better spread of goods deliveries over the day. Communication about those deliveries has also improved. If the delivery of an order is incomplete or if certain products are damaged, we can record this more easily and ensure that the error is rectified. All in all, this allows us to avoid stress on a construction site and make events more predictable. The nice thing is that everyone involved in a construction project receives the same information. As a result, miscommunication between main and subcontractors has become a thing of the past, and everyone is kept up to date."

Emission reports

Pije has great expectations with regard to emission reporting. "The CSRD is of course new, it takes all parties involved to get used to reporting on emission levels. The Supply Chain Portal has allowed us to make this as easy as possible. We have better insight and can target the activities responsible for the highest emission levels. In addition, we can make more targeted choices about where to opt for electric transport and where not to. Because let's be honest: it's a utopia to think that we can already make construction projects completely

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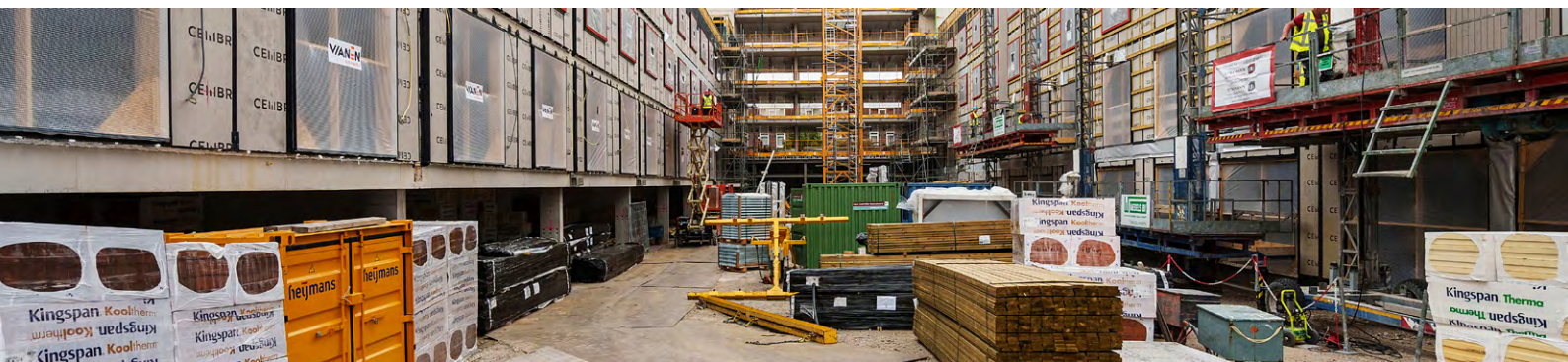


Madeleine Kroeze
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emission-free. After all, grid operators simply cannot supply the required amount of energy to achieve this. This means that we have to make choices: if we can use a certain amount of energy at a particular location, should we use it for an electric crane or for electric transport? The Supply Chain Portal allows us to calculate the alternatives and thus make well-informed decisions."

Leading role

ICT Incore's experience in construction is also being applied in other industries, says ICT Incore's Madeleine Kroeze. "Heijmans is a pioneer in the field of sustainable logistics. They are leading the way - not only within construction, but also (inter)nationally - and they inspire us to innovate the Supply Chain Portal with new functionality. I strongly believe that other companies with a high volume of transport movements can learn from Heijmans when it comes to emission monitoring and reduction.





It's great that ICT Incore has the opportunity to share those lessons with other industries."

Pije is proud of Heijmans' pioneering role. "We have been leading the way when it comes to sustainable construction activities for years. This is also a known fact within the market. However, not so many people know that we are becoming more sustainable in all aspects of our operation, including the field of construction logistics. But it's great that ICT Incore and Top Sector Logistics are aware of this and that we are working together to make our industry more sustainable. If more companies start using the Supply Chain Portal to monitor and reduce their emission levels, we can all have more impact. It's really great that we can play this role within the market."

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Senioradviseur bouwlogistiek bij Heijmans

Meer weten over deze case?



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