Renewable Energy Project Management Software

0

4 Practical Benefits with Cora Introduction: The Renewable Energy Market Today

Strategic Portfolio Management (SPM)

2 Document Management and Audit Trails

- **3** Stakeholder Management and Cora Portals
- **Flexibility and Ease of Use**

Cora: the power of predictability

Introduction: The Renewable Energy Market Today

The move away from fossil fuels to renewables is now so universally accepted that the process has begun to accelerate and is taking on a momentum of its own. According to the United Nations Development Programme (UNDP)¹,

"Total capacity growth worldwide of renewable power is set to almost double in the next 5 years, overtaking coal as the largest source of electricity generation by early 2025 globally."

This growth is nearly a third more than had been predicted just one year ago. Which reflects how both the world of business, and governments across the globe have all accepted this reality and are now embracing it enthusiastically.

As far as businesses are concerned, what this move means is that all sorts of new avenues have suddenly opened up. And in their recently published paper, "2023 Renewable Energy Industry Outlook"², Deloitte focus in on three of these new areas. "Renewable power will overtake coal as the largest source of electricity generation by early 2025."

UNDP





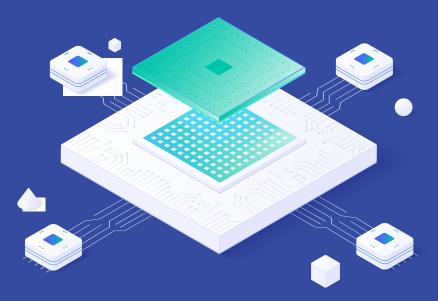
Component Manufacturing

The exponential growth in investment in renewables has seen a similar increase in the demand for certain kinds of products, and has created fresh demand for a whole slew of new products and their parts that hadn't previously been needed. All of which is fuelling the growth in component manufacturing.

Wind turbines are made up of towers, blades, nacelles and all sort of other components which form part of their substructure. While solar needs photovoltaic (PV) wafers, cells, modules and innumerable other parts and pieces.

Then there's all the activities around the infrastructure needed to store and transport all this new type of power. All sorts of materials and components, both new and conventional, are needed to transform the electric grid, so that it'll be able to handle the increase in the battery storage capacity that's going to be required. It was specifically to help U.S. industry address all of the above that the U.S. Congress passed the recent Inflation Reduction Act (IRA) and the CHIPS and science Act, both of which are an acknowledgement of how far the U.S. has slipped behind in this area, when compared to Asia, and specifically to China.

But many other countries, most notably the EU, are making similar investments around the expansion in manufacturing processes that are now needed to make renewables a reality rather than a mere aspiration. All of which has created a whole new and expanding market in parts and components.





Green Hydrogen

One of the principal challenges around renewable energy is the fact that only a limited number of places have access to the wind and sun you mostly need to generate it. So much of what you generate needs to be transported elsewhere.

So we need to find new ways of transporting things, otherwise whatever you gain by changing to renewables will be undone by the way you move what results from place to place. And the most promising avenue in that regard is hydrogen.

But it has to be <u>green hydrogen</u> (or at least blue) and by far and away the biggest problem with green hydrogen is its cost. It's significantly more expensive to produce than grey hydrogen, which is made using natural gas or methane. Which is why 99% of the hydrogen produced in the U.S. is currently grey. But the Infrastructure, Investment and Jobs Act (IIJA) includes \$8 billion earmarked for investment in regional clean (i.e. green) hydrogen hubs to help with its storage and transportation. Even more significantly, the IRA includes a tax credit of \$3 for every kilo of clean hydrogen produced, which effectively eliminates that price differential. And is sure to encourage further investment in the infrastructure needed to make the use of hydrogen much more widespread.

Similar investments are being made in the EU, where half their €1 trillion green deal has been set aside for green hydrogen, as well as in China, Japan, Korea, Germany and California. And while it's unlikely to change the commercial landscape any time soon, it's already beginning to have a significant impact on industry and on long haul transportation.





Offshore Wind

The technology around generating power from offshore wind is improving exponentially. And as the costs continue to tumble, governments and industry are starting to think of offshore wind as a significant contributor in getting to net-zero.

The U.K, the Netherlands and Germany are leading the way in Europe, with China, Taiwan and Vietnam forging ahead in Asia. And although the U.S. was slow to see the potential, that's now beginning to change. As, apart from anything else, the sheer size of the U.S. makes offshore wind very appealing, now that those costs are starting to come down. Most of the power currently generated by onshore wind in the U.S. is produced inland and has to be transported to the coasts, where much of the population live. If power could be generated offshore, those cities could be served much more economically. Which is why many of the east coast states are beginning to invest in it, with New York and Massachusetts leading the way there. And, once again, there are attractive provisions in both the IIJA and the IRA encouraging them to do so.

What all of this activity around offshore wind means is that there are any number of new areas that manufacturers are now expanding into. Which is proving to be hugely exciting for organizations working in engineer-to order, construction and the provision of infrastructure. Because moving from fossil fuels to renewable energy is going to need an enormous amount of work, and is already generating massive investment. A CONTRACT OF A

1. <u>https://www.undp.org/energy/blog/three-trends-will-shape-energy-sec-</u> tor-2023

2. <u>https://www2.deloitte.com/content/dam/Deloitte/us/Documents/energy-re-sources/us-eri-renewable-energy-outlook-2023.pdf</u>

1. Strategic Portfolio Management (SPM)

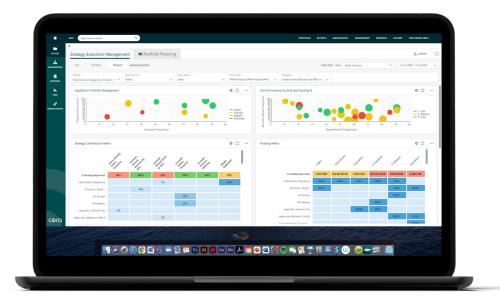
"Private investment in renewables (in the U.S.) hit a record high of \$10 billion in the past year."

Deloitte

Companies working in the renewable energy space tend to be one of two types. Either you are a large, legacy organization generating and distributing energy in the traditional way, and are now expanding and adapting to this new landscape. Or you're a newly created start-up type, and have been set up to service and work with those larger legacy organizations as they change and adapt.

Either way, the kinds of projects you're working on are invariably large, sprawling, multi-year projects that cost hundreds of millions of dollars. So it's extremely beneficial to have a tool that can help you decide which projects to go ahead with, and which ones to pass on.





<u>Cora's strategic portfolio management</u> functionality means you can design your portfolio structure so that it's perfectly aligned with your strategy. It functions in both a dynamic and intuitive way, and can be instantly viewed as a series of charts and graphs. So senior management can consult together about the current portfolio, and consider and explore changes around forecasts and planning.

It gives you the tools to perform an inventory of all your current projects, so you can devise a clear Capacity Plan based on what skills and assets are needed, when and for how long. Which will give you valuable insights into each project's risk level and its net present value.

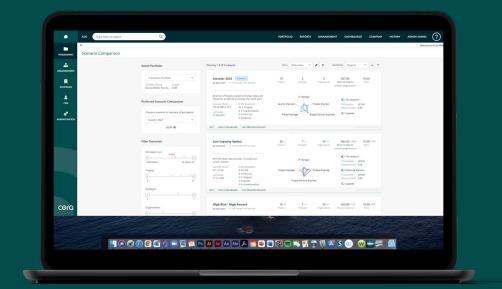
You can then run an initial <u>Portfolio Assessment</u> on data using a prioritization toolset that's configured around your company's overall goals. So you can score a project's delivery against each of your strategic objectives, to see if it's likely to deliver on those goals. And you can then compare different portfolio structures using the **Scenario Comparison** tool.

What-if Capacity Planning

This means you can experiment with any of the elements within your portfolio structure to see how changing one variable will impact the rest of your portfolio. And because everything is dynamic and clearly visualized, you'll be able to see, and to show others, how each possible change will affect everything else. Whether that's around risks, issues and outputs, or timelines, resources and budgets.

So, using the **what-if Capacity Planning** module, you can extend and change, say, some of the timelines, to see if there's a more productive way for you to use your available assets and resources. Which could easily help increase the number of projects you're able to complete within a given time period. Making that portfolio much more profitable.

Once you have all your project and portfolio data gathered together in the one central hub, and can see how each element is connected to the next in a way that's clearly visualised, you'll be able to establish a set of strategies that will ultimately ensure that your portfolio is far more profitable.



	Enterprise Portfolio / Gee Projects / Capital Programme / System Implementation									Welcome to Coral
PROGRAMMES			Project ID Project Manager Pr	aject Status Project Type	% Comp	lete Finish Du	le Documents Life-Cycle Sv		Cent	Time Score
4	Project Documents System Implementation			Green Capital P		13 Feb 2			5 6 Green	Amber Gree
ONSANISATIONS	Home Artefacts Schedule Registers Financials	Governance Report								
STATIONS	Home Artestos Schedule Registers Hinancaes	Governance Report	ng							
	HIDE EMPTY CATEGORIES	ADD							SHOW VIEWS SHO	NW COLUMNS EXPORT
	01. Health and Safety (8)	TYPE CHECK	IN/OUT DOCUMENT NAME	1	VERSION 1	PROPERTIES	ADDED BY		UPLOAD DATE	DOCUMENT SIZE
	02. Financial Management	Die Ore	k Out Health and Safety Regulatio	ns 2018 revised.docx	2	Edit	Davies, Tom (tdaviess)		31 Jul 2018 09:08:05	744.5 1/8
	03. Method Statements	Check	ed Out Health and Safety Metrics 2	254-17 altex	1	Edit	Davies, Tom (tdaviess)		31 Jul 2018 09:09:48	7.91 KB
	04. Sub-Contractor Management		k Out Good practice guide on He		1	Edit	Davies, Tom (Idaviess)		31 Jul 2018 09:10:24	2.49 MB
	4.1 Contract Documents	-	ed Out Quality Trackerstor		2	Edit	Davies, Tom (tdaviess)		31 Jul 2018 09:16:46	8.27 10
	4.2 Quality Management (5)	E .*	ok Out SET New Platform Update -		1	Edit	Davies, Tom (Islaviess)		31 Jul 2018 09:19:45	35.86.93
	05. Site Establishment (I)	-								
	06. Materials/Equipment (2)	6008	k Out Core PPM Configuration Too	ikit April 2019.docx	1	Edit	Stakeholder, External (ExternalSta		18 Jun 2019 07:36:27	5.53 MB
	07. Supplier Management	0	Cora Brochure		1	Edit	Stakeholder, External (ExternalSta	keholder)	26 Jun 2029 11:56:30	
	08. Project Initiation Documents (2))L Che	k Out Why Cora PPM.pdf		1	Edit	Marphy, Niall (nmarphy)		15 Mar 2021 15:09:01	2.61.MB
	09. Miscellaneous (1)									
	10. Portal Documents (5)									
	Risks (1)									
	Issues (3)									
	Ragisters									11966479
cora	Action Log (3)	1 to 8 of 8 Results			н 4	1 н н			Res	aults per page: 50 ∨
and the los				-		_				
	an a	i 🗖 💽 📆 I	Ps Ai Id Ae Me 人	💿 🔹 🗐	8 🕿 🗉	5 📆 👚	🗊 🛃 S 📖 🛛	W) NOW		

2. Document Management and Audit Trails

"In the first 8 months of 2022... renewable energy's share of US electricity generation rose to 23%."

Deloitte

Because the renewable energy market revolves around large, multi-year projects costing hundreds of millions of dollars, one of your most important activities will always be around **document management**. Which works on two levels.

First, you need to be able to easily upload photos and update documents and snag lists on site, on the go and as you do them. Which is particularly relevant when it comes to working at the kinds of locations where you tend to find wind and solar projects.

The Cora apps for iOS and Android means you can effortlessly document any changes you make and upload anything that needs to be recorded, anywhere and everywhere, even when you're offline. Second, you need all that info, all your documents and data, to be stored and organized in a way that's both logical and easy to access. Because one of the most important elements in all projects is having an **audit trail** that's completely reliable, so that every single one of your activities around a project can be accounted for.

When, for instance, transmittals are sent to a client, it's vital that you and they know which emails were sent where, when they were opened, who saw them and what if any changes were made to any of the accompanying documents.

TYPE	CHECK IN/OUT	OCUMENT NAME	VERSION :	UPLOAD DATE	ADDED BY
DOC	Check Out	lealth and Safety Regulations 2018 revised.docx	2	31 Jul 2018 09:08:05	Davies, Tom
x	Checked Out	lealth and Safety Metrics 2014-17.xlsx	1	31 Jul 2018 09:09:48	Davies, Tom
کر PDF	Check Out	iood_practice_guide_on_Health_Safety.pdf	1	31 Jul 2018 09:10:24	Davies, Tom
x	Checked Out	Quality Tracker.xlsx	2	31 Jul 2018 09:16:46	Davies, Tom
PPT	Check Out	ET New Platform Update – 15th June.pptx	1	31 Jul 2018 09:19:45	Davies, Tom
DOC	Check Out	ora PPM Configuration Toolkit April 2019.docx	1	18 Jun 2019 07:36:27	Stakeholder,
کر PDF	Check Out	Vhy Cora PPM.pdf	1	15 Mar 2021 15:09:01	Murphy, Nia

1 to 7 of 7 Results

ADD

н ∢ 1 → н



Cora's Document Management tools

<u>Cora's document management tools</u> give you a clear audit trail documenting who received and read what, and who was responsible for authorizing whatever it was that was done or not done. Everything is time and user stamped, stored in the one place and in a way that's logical and easy to access. With a clear sign-off process which prevents any disputes breaking out between you and any of your subcontractors, so you can avoid any potential fines or penalties.

So when, say, an engineer leaves to take up a post elsewhere, the documents they've been working on don't suddenly disappear with them, but are archived and easily retrievable.

Which means you have complete control, and full and immediate visibility. It's all there on your dashboard. And you're always able to provide due diligence whenever it's called for, whether that's from funding agencies or potential buyers.

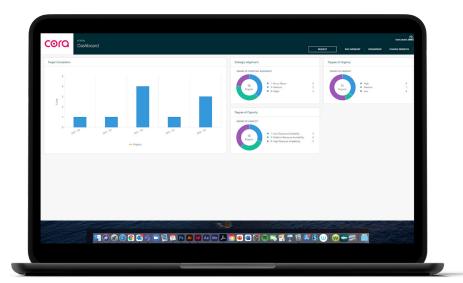
3. Stakeholder Management and Cora Portals

"The IEA predicts the world is set to add as much renewable power in the next 5 years as it did in the past 20."

UNDP

The kinds of projects you work on in the renewable energy sector necessarily involve all sorts of stakeholders, so **stakeholder management** is central to being able to deliver your project on schedule and on budget.

On the one hand, you're in conversation with large funding organizations and the regulatory body and or bodies in charge of the power grid. Which usually means you're going to be working with various governmental departments.



	_							OELETE Toms V	fan Ibeleted	× 100	e views show co	unar prost
MOJECT ID 1	START DATE I	MORET	FINISH DATE I	PROJECT MANAGER [PROJECT TYPE	PROJECT STATUS [SCONE 1	RSKMA. (Alsounces :	HEALTH & SAF
	01 Sep 2022	Centre of Excellence	28 Apr 2023	Tom Davies MBCS	Capital Project	• Amber	• Red	• Anber	• Green	Anber	• Green	Amber
	07 Jan 2019	Fibre Network Upgrade	26 May 2021	Kaleab Woudeneh	Capital Project	• Green	• Anber	• Green	• Green	• Green	• Anber	• Green
	01 Feb 2021	Install New Server	12 May 2022	Jonathon Green	Capital Project	Anber	• Green	• Green	• Green	• Creen	Green	• Green
846	26 Sep 2019	Internal Training Improvements	12 May 2020	Tom Davies MBCS	Capital Project	• Green	• Green	• Green	Green	• Green	• Green	Amber
887	15 Jan 2019	IT Infrastructure Upgrades	11 Jan 2022	Colin Lyons	Capital Project	• Red	• Green	• Red	Green	• Green	• Red	Anber
905	01 May 2019	NPI - Model-4 Release	01 May 2019	Paul Rees	Capital Project	Ppaine	• Green	• Green	• Green	Creen	• Green	Green
950	04 Mar 2019	NPI - ModelS Release	15 Mar 2019	Deny Lynch	Capital Project	Pipeline	• Green	• Green	• Green	• Green	• Green	Green
926	04 344 2019	NPI - Model-6 Release	11 Sep 2019	Tom Davies MBCS	Capital Project	Pipeline	• Green	• Green	• Green	• Green	• Green	Green
875	10 Feb 2020	Smart Data Analytics Concept	02 Jul 2021	Colin Lyons	Capital Project	Pipeline	• Green	· Green	• Green	• Green	Green	Green
849	01 Jan 2019	System implementation	13 Feb 2023	Tom Davies MBCS	Capital Project	• Green	• Amber	• Green	• Red	• Green	• Amber	Green
		🛂 🔕 🔗 🖉 💿 🔛 📡								-		

And on the other, there are going to be any number of 3rd party subcontractors and vendors you'll need to take charge of the different elements on your projects that require their specific expertize.

So it's really important to be able to talk to each of these different parties in a way that's specific to them. And yet to be able to do so from within the same, single system. Which is precisely what we created our portals for.

Cora Portals

<u>Cora Portals</u> allows you to set up a framework of exchange that's specific to whoever it is that you need to exchange information and keep up to speed with. And they couldn't be easier to create.

Using the basic 'building blocks' model, you (or any authorized user) select a template and then configure it into the desired portal, by simply dragging and dropping whichever of the features you need for that particular exchange.

The portal you put together for, say, the update you send to your CFO with all your budgetary information, will be very different to the one you set up for a 3rd party subcontractor, who just needs to be informed of whether, and when, certain tasks and deadlines have been met.

And it's not just that some people will be able to see things that others won't have access to. You can, if you like, get rid of the entire field. So they won't even be aware of whatever it is that they're being prevented from seeing.

Cora portals give you compete and effortless control around your stakeholder management. So that each of the individual teams and parties working on a project only see exactly what you want them to. Both internally, and externally.





4. Flexibility and Ease of Use

"The big advantage we've gotten using the Cora tool is flexibility, speed and scalability."

Mario Clariza, Senior Advisor, Project and Portfolio Management, Elanco

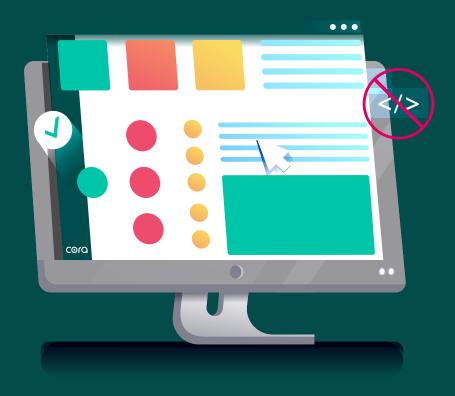
One of the big challenges for everyone working in the renewable energy space stems from having to work with so many other teams and organizations. Everyone uses their own systems and processes for storing and managing their data, so a huge amount of time is lost just trying to find out where a project is in the course of its lifecycle, and how it fits in to the rest of your portfolio.

Cora, a code/low code platform

Which is why you end up installing a software solution. Now, you think, all your documents and data are going to be logically organized and everyone will be working in the same way and off the same facts and figures. The problem is, all too often that software sits on your system unused.

Because none of the people in your organization have any idea how to use it. So everything continues to be done by hand and on innumerable Word docs and Excel sheets.

That's why we designed and built Cora as a <u>no code/</u> <u>low code platform</u>. We were determined to make Cora a platform that people not only used, but genuinely looked forward to using.





Adapted for you

As soon as you decide to go with Cora, we allocate a team of business analysts to sit down with you so that we can get a crystal-clear idea of exactly what your pain points are. Perhaps you have requirements around your internal processes, and you need to be able to work using Kanban, (lean) Sixth Sigma or any of the other project management methodologies. Or maybe you have particular needs around your interactions with external stakeholders and 3rd party contractors.

Whatever your needs are, we can customize our out-of-the-box product so that it's adapted specifically for you, and can do precisely what you want and need it to.

Because the one thing we've learnt from working with clients for more than twenty years is that you can only successfully transform a business when you both work together as partners.

Once you're completely happy with your set-up, we then work with you to make sure the implementation goes smoothly. So you'll now have access to your <u>Customer Success Team</u>, who are constantly on call and are more than happy to help you with anything at all that you might be having difficulty with.

Configured by you

Then, from the day you 'go live' you'll see that a number of people in your organization have become instant Cora champions, and are telling everyone about how easy it is to use. The vast majority of our customers tell us that it took them a matter of hours to become completely comfortable using it, and were soon demonstrating what it can do to their colleagues.

We've invested heavily in making sure Cora is as easy and as simple to use as it possibly can be. So practically everything is configurable. There are a wide variety of templates that you can configure in whatever way you want, by just dragging and dropping whatever you need.

So when you want to create a new project, or change the way you view data so that they're visualized as Gantt charts or as graphs, you'll find it immediately intuitive and incredibly easy to do yourself. You just drag and drop whatever you need into where you need it.

And don't worry if just the sight of all those graphics, charts, boxes and complicated visuals fills you secretly with terror. Many (of us!) feel exactly the same way. So we've spent a lot of time and energy in devising our **Cora Assistant**, which really will walk you through whatever you want to do, step by step. It's there, in the top right-hand corner of your screen.





Cora – 'famously easy to use'

This isn't a throwaway line that we're casually adding as part of our sales pitch. We really do put in a huge amount of effort into making Cora something people genuinely look forward to using. There's a reason we've acquired that happy epithet, 'famously easy to use'. It genuinely is.

The result is that Cora offers a uniquely flexible solution for whatever your challenges are. Whether what you need is that 30,000 foot, bird's-eye view of your portfolio, or a detailed, granular view into each and every stage of your project's lifecycle. Or, indeed, both. Cora provides you with that unrivalled and effortless visibility.

It's all there on your dashboard.

Cora: giving you the power of predictability



Radically reduce costs Significantly increase revenue

Cora empowers enterprise organizations to plan and manage their long-term projects.

What we do

We make sure that everything you do and make is delivered on time and on budget, thanks to our seamless integration of your forecasts, schedules, resources and financial controls, while molding to your existing processes and integrating other solutions required to give you a single source of truth.

How we do it

By streamlining and centralizing all your data, in real time, giving you immediate and effortless visibility into every project and across your portfolio.

What that means

Those gaps between planned and actual costs and delivery are significantly reduced, so your costs and waste go down and your margins and revenue soar.

We make you the 'control tower'

Where all your data and documents are collected and organized. Everything is constantly updated and immediately accessible.

So you get to effortlessly orchestrate each and every one of your projects.





Prioritize the right projects

Consistently recognized by Gartner[™] in its Magic Quadrant for Strategic Portfolio Management, Cora gives you that bird's-eye into your portfolio. So you can visualize and evaluate how they each fit in with your strategic objectives.



Integrate processes

Bring any existing processes into the one, central system, so everyone is working in the same, standardized way, and off the same facts and figures.



Sync your supply chain

Track and monitor all the data that your parts, materials and assets generate as they move through your supply chain.



Centralize your project data

Get immediate and granular visibility into everything, wherever you are. It's all there on your dashboard.



Reduce deviation

Minimize those gaps between planned and actual costs and delivery, so you can be confident of continually maximizing your margins.



No/low code configurability

We've designed all our products so that they can be easily configured to meet your precise needs, both for you and by you. And because Cora is so famously easy to use, you get immediate buy-in across your whole organization.

The Power of Predictability

 \bigcirc

Contact Us

E: info@corasystems.com | W: www.corasystems.com | T: +353 7196 22078