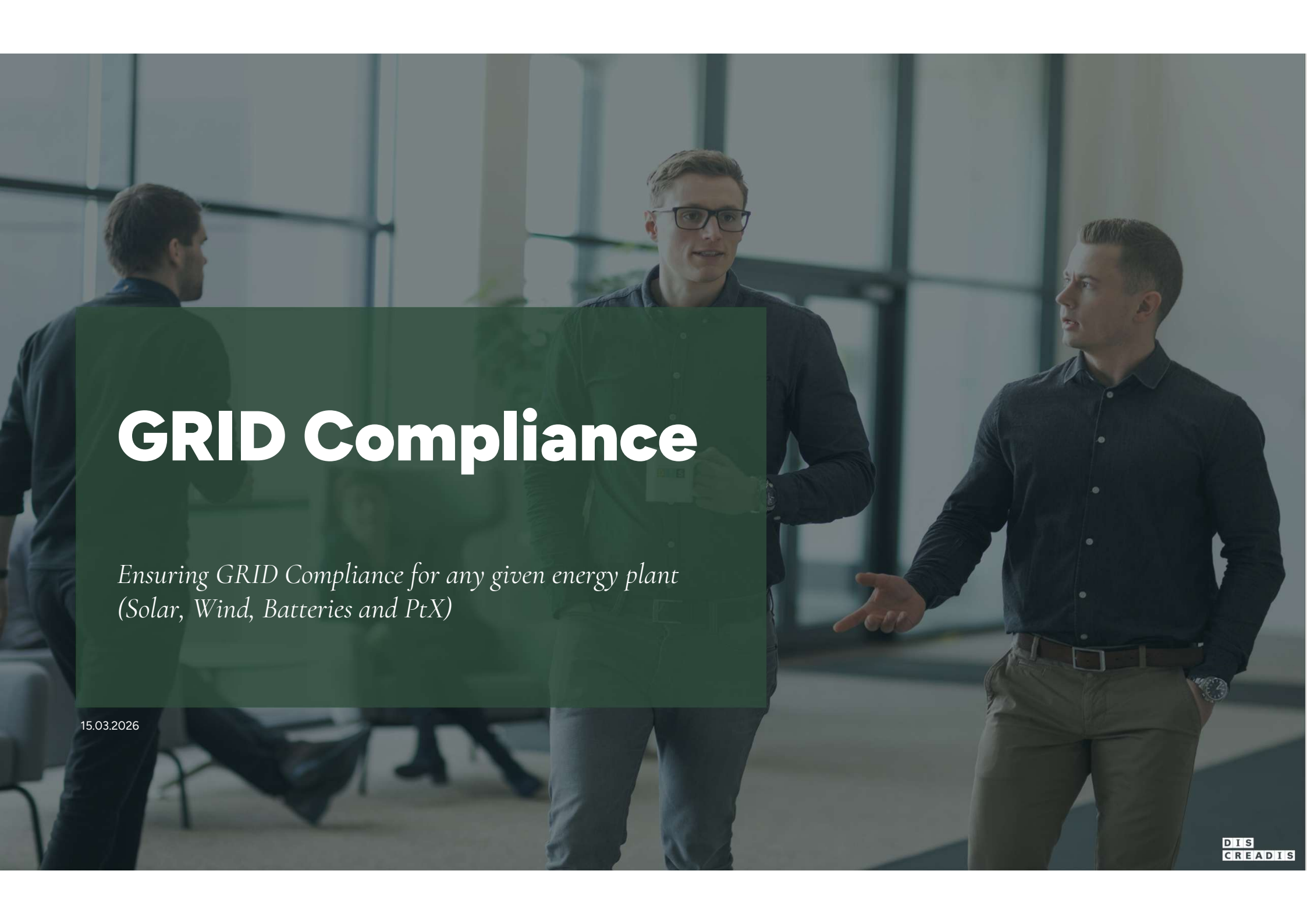




GRID Compliance

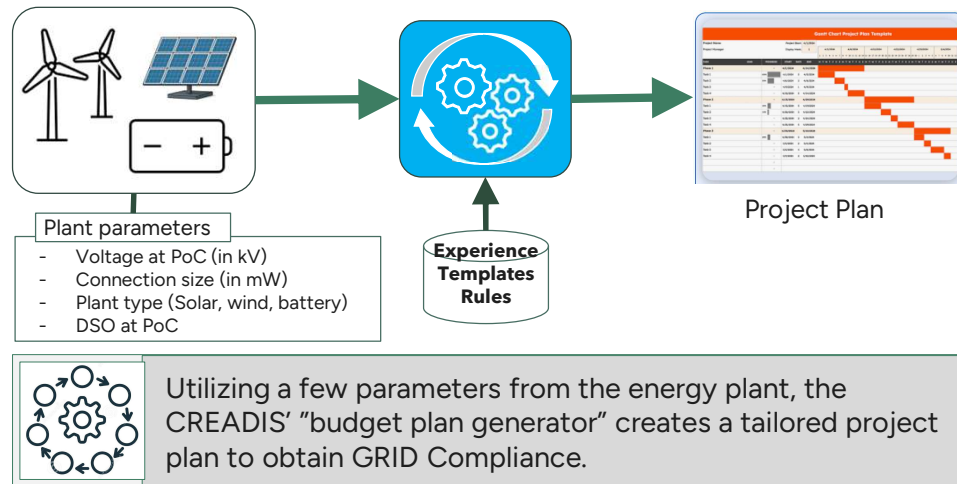
*Ensuring GRID Compliance for any given energy plant
(Solar, Wind, Batteries and PtX)*

15.03.2026

GENERATE EXECUTE CONNECTED

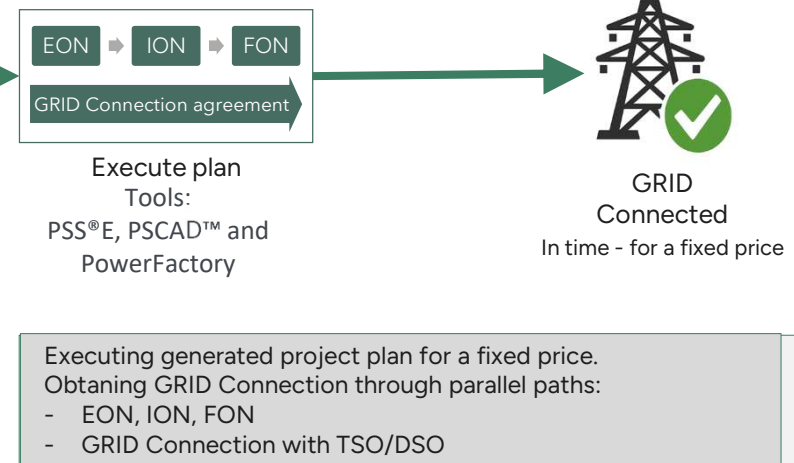
CREADIS helps developers, investors and EPC's to achieve GRID Connection - in time, for a fixed price.
For any given renewable power plant
(Solar, wind, batteries and PtX)

GENERATE



EXECUTE

CONNECTED



GRID Compliance in headlines

WHY GRID Compliance?

GRID Compliance is crucial to obtain, to get GRID Connection. To get the plant in operation on the GRID - creating revenue - on time. It's a critical element in plant establishing.

WHAT does CREADIS do?

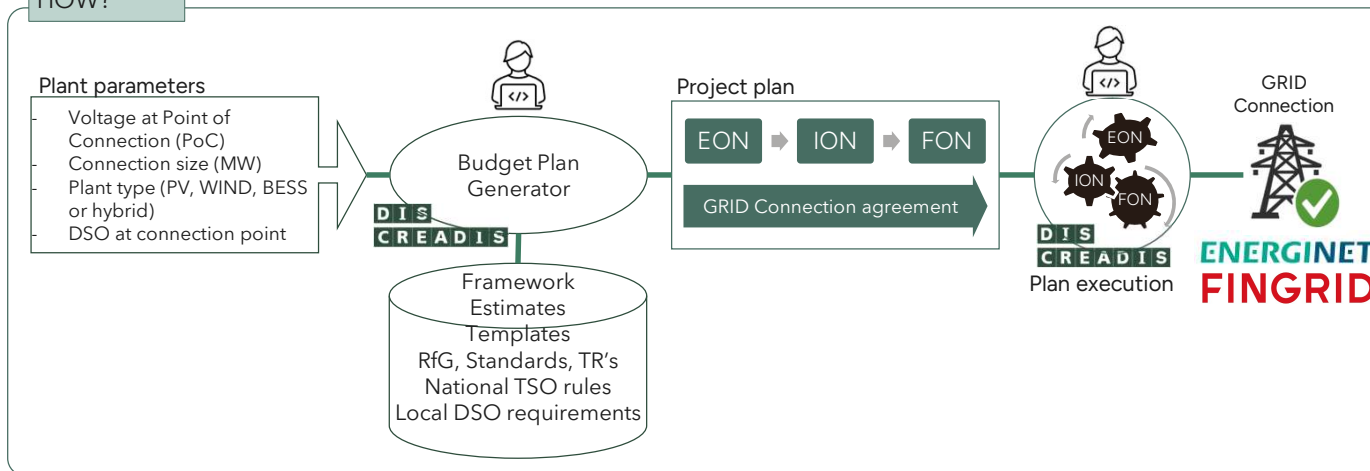
CREADIS ensures GRID Connection in time. By creating a project plan, based on a few parameters regarding an energy plant. The plan includes estimates, milestones and a budget. CREADIS executes the plan for a fixed price.

The Challenge

Obtaining GRID Compliance is a complex and demanding task. You need to:

- master a lot of (electrical) disciplines
 - know directives, standards and technical reports
 - be able to communicate with TSO/DSO's as well as embrace their local requirements
 - manouver 2 parallel paths that interconnect (Compliance - Connection)
 - understand products from tech providers
- Include it all in a plan - leading to GRID Compliance.

HOW?



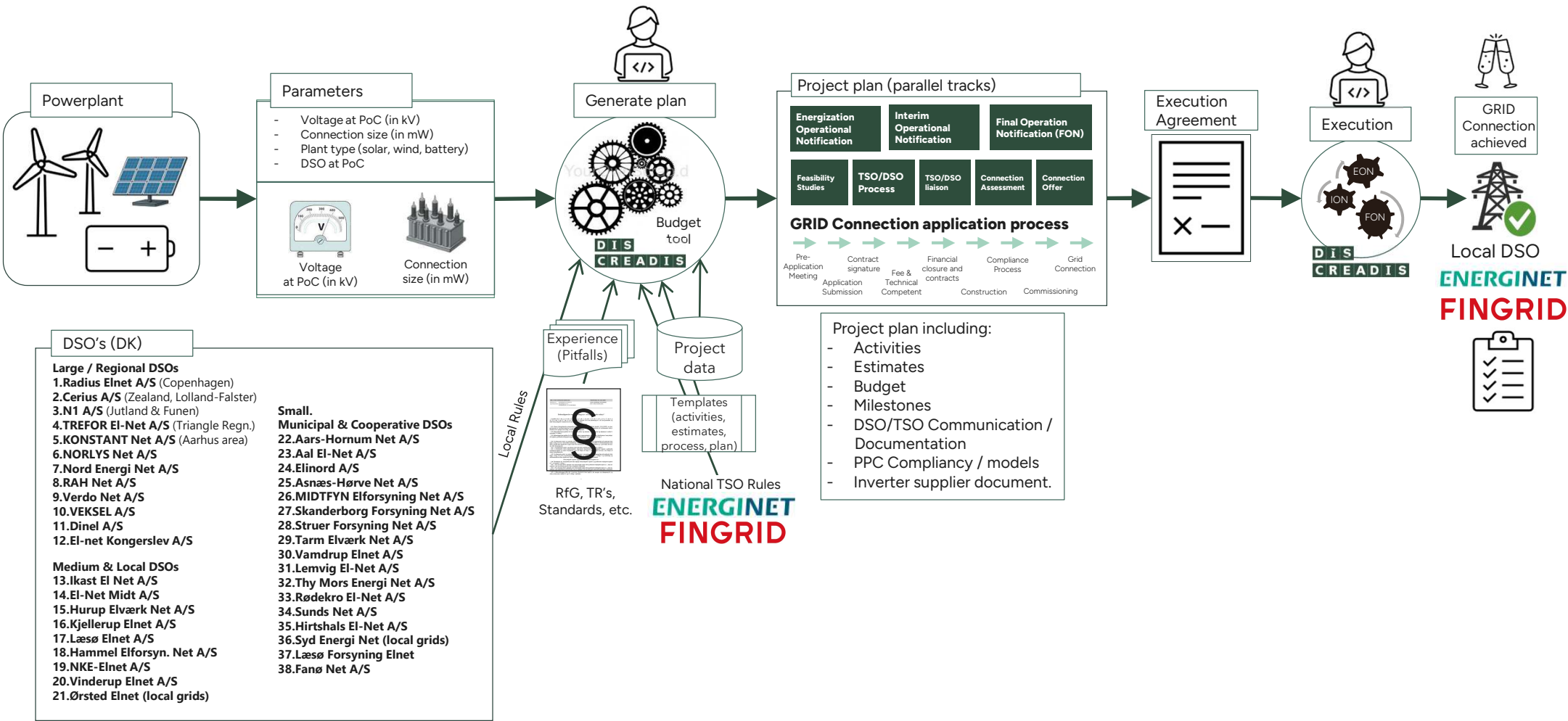
WHY Creadis?

Because we secure GRID Connection - in time - on fixed price.

Avoiding:

- Pitfalls
- Delays
- Expensive filters
- Non-compliant suppliers
- Miscommunication with TSO/DSO

Generation – execution - connection



Value proposition

For developers, investors and electric installers (EPC's) within renewables, we take **full responsibility** for obtaining GRID Compliance (in time) for any given energy plant (solar, wind, BESS, PtX, etc.) – for a fixed price.

By **generating a milestone plan** for achieving GRID Compliance – and thereafter executing the plan (**for a fixed price**), leading to GRID Connection for the plant.

Unlike traditional engineering companies that normally advise customers and work by the hour

– we obtain GRID Compliance for a fixed price.

Through all the GRID Compliance projects we have succeeded, data and knowledge have been gathered and structured into a framework. This engine makes it possible to derive a milestone plan including estimates and a fixed price.

Experience from each (energy plant) project constantly improves the engine and makes the GRID Compliance process extremely reliable.

We empower your project.

Steen Meldgaard

Senior Bussiness Developer

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Part Two: Sources

Requirements for Generators (RfG)

Relevant European standards

TR 3.3.1 and TR 3.3.2

EON-ION-FON

Connection Agreement (template)

National TSO requirements and process description

Local DSO demands and communication

Hardware/software specs

Power Factory / PSCAD

GRID Compliance (EON-ION-FON)

Energization Operational Notification (EON)

An EON grants permission to energize internal networks and auxiliaries through the designated grid connection point.

- Prepare itemized compliance statements.
- Update and submit applicable technical data.
- Provide simulation models and studies using measured test values.

Interim Operational Notification (ION)

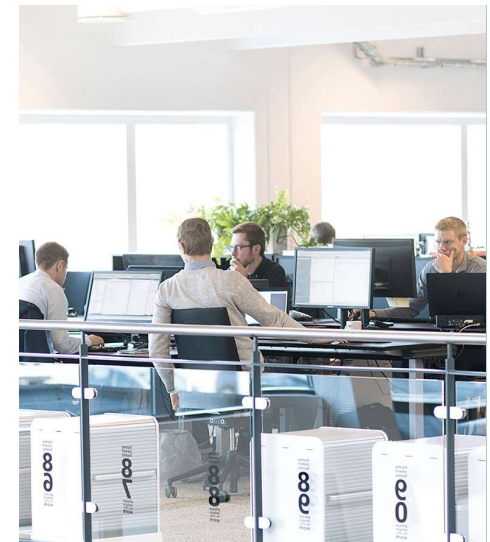
Allows temporary operation of power-generating modules through GRID connection.

- Update compliance statements and technical data for grid-relevant components.
- Support equipment certification by authorized entities.
- Prepare simulation models and conduct performance studies (steady-state and dynamic).
- Execute compliance testing and provide required documentation.

Final Operation Notification (FON)

Authorizes full operation of a power-generating module through the GRID connection.

- Provide updated compliance statements.
- Deliver updated technical data.
- Update simulation models and studies using actual measured values from testing.



Case Study: GRID Compliance Simulations for PV Plant (~10MW)

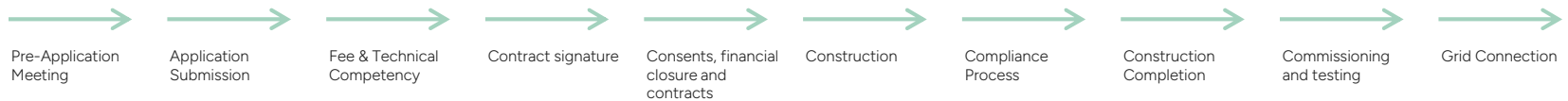
CREADIS developed a comprehensive model for a 10MW PV plant and performed essential GRID compliance simulations:

- Conducted steady state and transient stability simulations using Power Factory to meet Energinet grid code requirements.
- Analyzed plant-level performance for frequency and reactive power control.
- Prepared detailed compliance documentation for submission to Energinet.

The simulations was a part of executing the complete GRID Compliance plan. Ensuring GRID Compliance, enabling timely connection while optimizing plant stability and performance.

GRID Connection Application

TSO grid connection application process



Process	TSO/DSO liaison	Connection Assessment	Feasibility Studies	Connection Offer
- Manage TSO/DSO processes, including pre-application, submission, modifications, and connection offers. - Prepare required deliverables (forms, data, information) per TSO requests. - Advise customers on technical and economic project options.	- Engage with TSO/DSO for pre-application and clarify grid connection requirements. - Resolve technical queries in collaboration with OEMs and subcontractors.	- Develop budget estimates and analyze TSO technical data. - Prepare draft forms for formal connection applications.	- Build preliminary project models and conduct simulation studies for grid code compliance. - Evaluate cost-effective solutions to address technical challenges.	- Review grid connection offers for technical and economic feasibility. - Collaborate with TSO/DSO through compliance, commissioning, and testing phases.

Case Study: Nearshore Grid Connection Study

We conducted a grid connection study for a nearshore wind project, ensuring regulatory compliance and optimized performance.

Key contributions:

- Analyzed grid codes to identify compliance scenarios.
- Modeled array and cable setups for regulatory adherence.
- Simulated electrical systems to assess compensation needs.
- The study provided actionable recommendations, enabling cost-efficient and compliant grid connections.

GRID Compliance & Connection – combined



EON Energization Operational Notification

An EON grants permission to energize internal networks and auxiliaries through the designated GRID connection point.

- Prepare itemized compliance statements.
- Update and submit applicable technical data.
- Provide simulation models and studies using measured test values.

ION Interim Operational Notification

Allows temporary operation of power-generating modules through GRID connection.

- Update compliance statements and technical data for GRID relevant components.
- Support equipment certification by authorized entities.
- Prepare simulation models
- Conduct performance studies (steady-state and dynamic).
- Execute compliance testing and provide required documentation.

FON Final Operation Notification

Authorizes full operation of a power-generating module through the GRID connection.

- Provide updated compliance statements.
- Deliver updated technical data.
- Update simulation models and studies using actual measured values from testing.

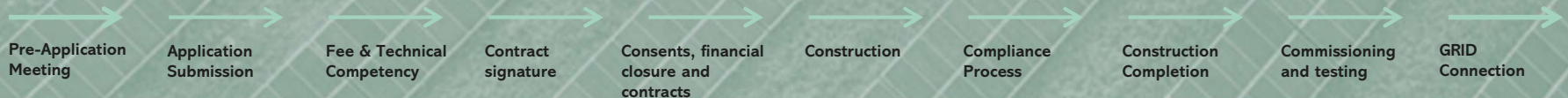
At CREADIS, we take responsibility for providing, navigating and executing the GRID Certification process to secure GRID Compliance.

Through the EON-ION-FON process.

Everything included: Directives, standards, technical reports, local requirements, TSO/DSO communication and documentation.

– leading too a full GRID Compliance.

GRID Connection application process



Process management

TSO/DSO liaison

Connection Assessment

Feasibility Studies

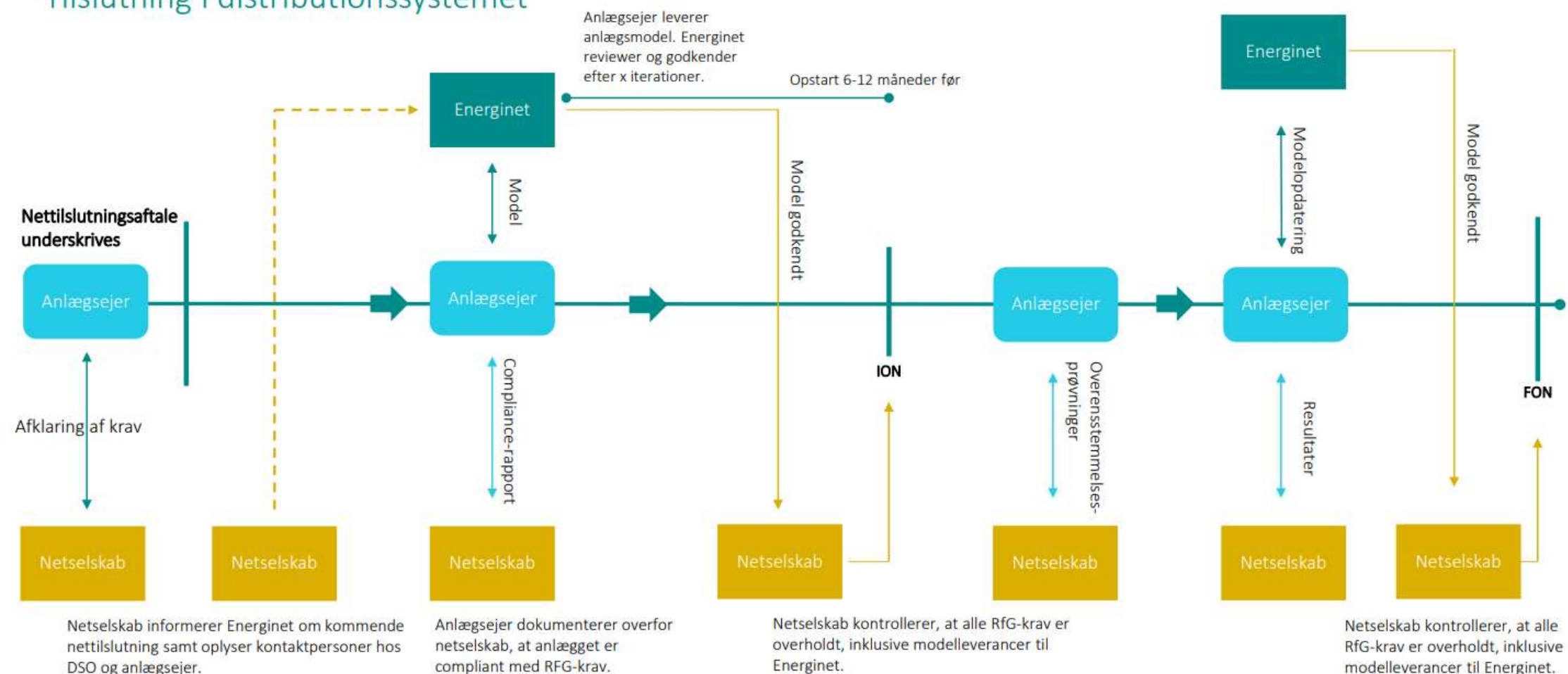
Connection Offer

GRID Connection process - DSO

PROJEKTTIDSLINJE + ANSVARSFORDELING

ENERGINET

Tilslutning i distributionssystemet

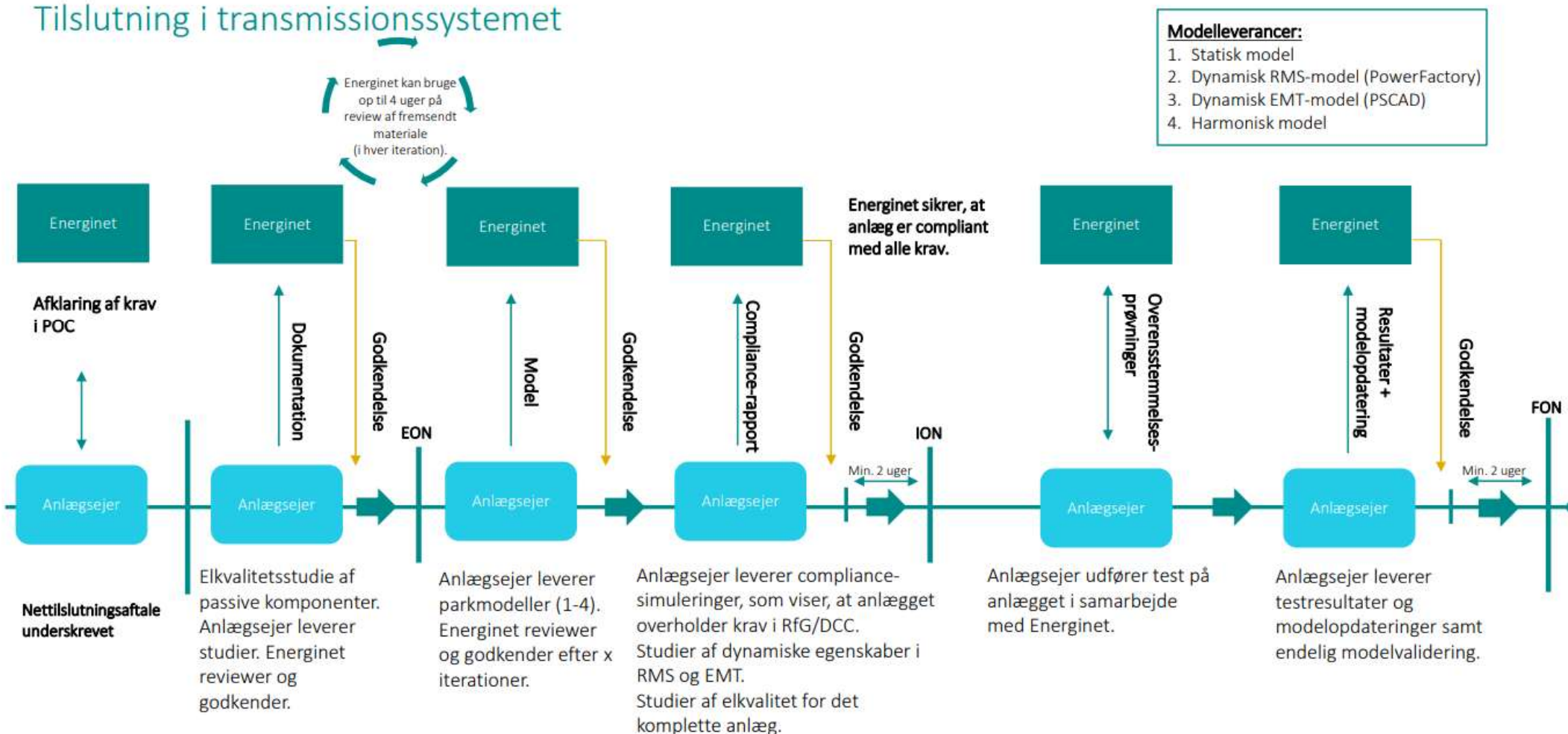


GRID Connection process - TSO

ENERGINET

PROJEKTTIDSLINJE – ANSVARSFORDELING

Tilslutning i transmissionssystemet



“**Thank you.**
Any questions?”



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