
EXCLUSIVE INTERVIEW

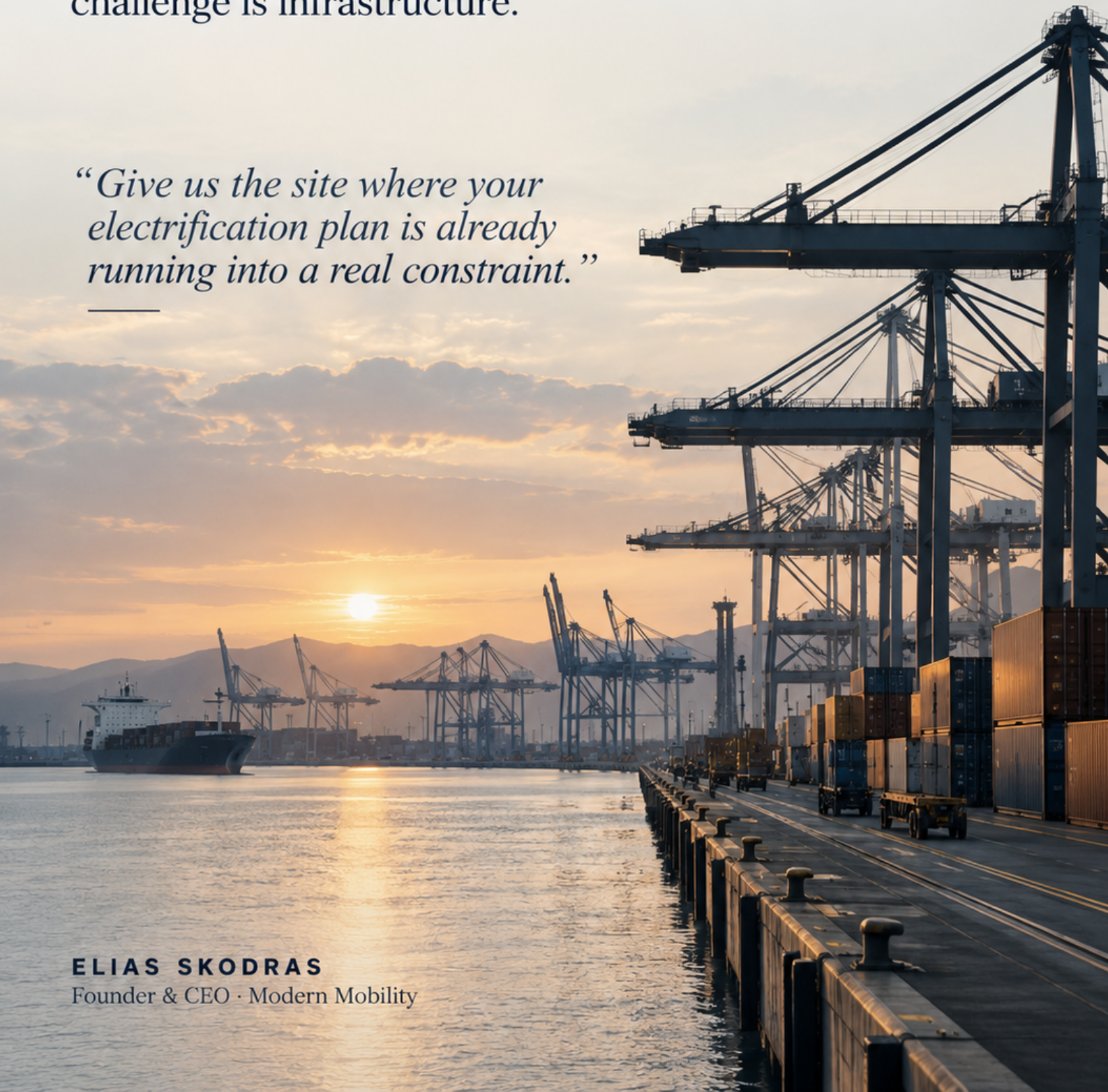
BEYOND ELECTRIFICATION

Elias Skodras on why the next mobility challenge is infrastructure.

“Give us the site where your electrification plan is already running into a real constraint.”

ELIAS SKODRAS

Founder & CEO · Modern Mobility



INTERVIEW BY DIMITAR ANGELOV

Beyond Electrification: Elias Skodras on Why the Next Mobility Challenge Is Infrastructure

The founder and CEO of Modern Mobility explains why electrification is becoming an infrastructure question, how that thinking led to Transport Energy Infrastructure and the Modern Mobility Institute, where Kinectra™ and vehicle engineering fit into the wider ecosystem - and why the next step is no longer another concept, but a real site.

Europe has spent years discussing electric mobility through vehicles, batteries and charging. Elias Skodras believes the more difficult question now sits underneath all three: what happens when transport depends on large amounts of electricity being available in exactly the right place, at exactly the right time? Skodras has worked in mobility for more than 25 years and today leads Modern Mobility and the Noventra Group. Entrepreneurial by background and strongly implementation-focused, his work has increasingly

moved into the interface between transport, energy and infrastructure - and into the research questions that determine what should actually be built. That work became the basis of Transport Energy Infrastructure, or TEI - developed through the Modern Mobility Institute, three research papers and an upcoming book. For Skodras, however, the research is not separate from the business. It increasingly explains why Modern Mobility's different capabilities belong together.

DIMITAR ANGELOV

Modern Mobility used to be presented much more through individual technologies. Today you speak about TEI and infrastructure systems. What changed?

ELIAS SKODRAS

We followed the problem further.

When you work in mobility, you naturally start with vehicles, fleets, batteries, charging and operating costs. But once electrification reaches a certain scale, the vehicle is no longer necessarily the difficult part.

You need to know whether enough electrical capacity exists at the location, whether it is available when the operation needs it, how charging interacts with the rest of the site, whether storage makes sense, what the grid can realistically provide and whether local generation improves the case.

And if you get those decisions wrong, the consequences are not theoretical.

Projects get delayed. Grid connections become bottlenecks. Assets are oversized or built in the wrong sequence.

Charging infrastructure exists, but the operating capability behind it does not.

At some point the question stopped being simply, How do we electrify transport?

It became:

What infrastructure has to exist for electrified transport to work reliably and economically?

That is essentially what we mean by Transport Energy Infrastructure.

And once you look at the problem that way, a lot of things that previously appeared separate suddenly belong to the same system.

DIMITAR ANGELOV

Is that why you created the Modern Mobility Institute?

ELIAS SKODRAS

Yes. And establishing an institute was something I had wanted to do for quite a long time.

There is a simple reason.

Every technology company tends to look at a problem through what it already has. Battery companies see batteries. Charging companies see chargers. Grid companies see grid infrastructure.

That is normal. We are not immune to it either.

But infrastructure decisions can last for decades. I wanted a place where the first question could genuinely be:

What does this site need?

Not: Which of our products can we put there?

That is an important role of the Modern Mobility Institute. It gives us a dedicated environment for applied research, infrastructure economics, policy and system-level questions.

Modern Mobility remains the entrepreneurial and implementation side.

The Institute can investigate the problem without having to force the answer toward a particular technology.

And personally, that distinction matters to me. I like research, but I am still an entrepreneur. Research becomes really interesting when it improves a decision - and eventually changes what gets built.



DIMITAR ANGELOV

The Institute has already produced three research papers. What is the core argument?

ELIAS SKODRAS

It developed step by step.

The first paper, Beyond Electrification - The Emergence of Transport Energy Infrastructure, starts with one basic problem: having enough electricity somewhere in an energy system does not mean that the required energy is available where transport actually needs it.

Transport demand is physical. It appears at ports, airports, depots, logistics centres, motorway corridors and industrial locations. And increasingly it is power-intensive and time-sensitive.

So we started moving the discussion from simply how much energy exists toward where and when that energy is actually available.

The second paper goes deeper into architecture, investment and coordination. Once you see TEI as a system, you cannot optimise every component separately and assume everything will work together.

The third paper asks the practical question:

How do you decide what should actually be built?

What capability does the site need?

Where is the real constraint?

Which intervention addresses it?

And is the evidence strong enough to justify investment?

A principle we use is:

Capability before assets. Availability before technology. The binding constraint before the intervention. It sounds theoretical.

It actually stops people spending money on the wrong infrastructure.



DIMITAR ANGELOV

And now that work is becoming a book?

ELIAS SKODRAS

Yes. I was approached about developing it into a book, which was not the plan when we started with the first paper.

But one paper became two, two became three, and eventually it became obvious that we were dealing with parts of a much larger architecture.

The manuscript is finished now, and the book - Beyond Electrification: The Architecture of Transport Energy Infrastructure – is going to publication shortly.

It is not an argument against electrification. Quite the opposite.

It is about what happens after someone decides to electrify.

A government, port, airport or transport operator can say, “We are going electric.” Fine.

Then the difficult questions start.

Where does the power come from?

When is it needed?

How much is needed simultaneously?

What can the grid support?

Where does storage add value?

Can local generation contribute?

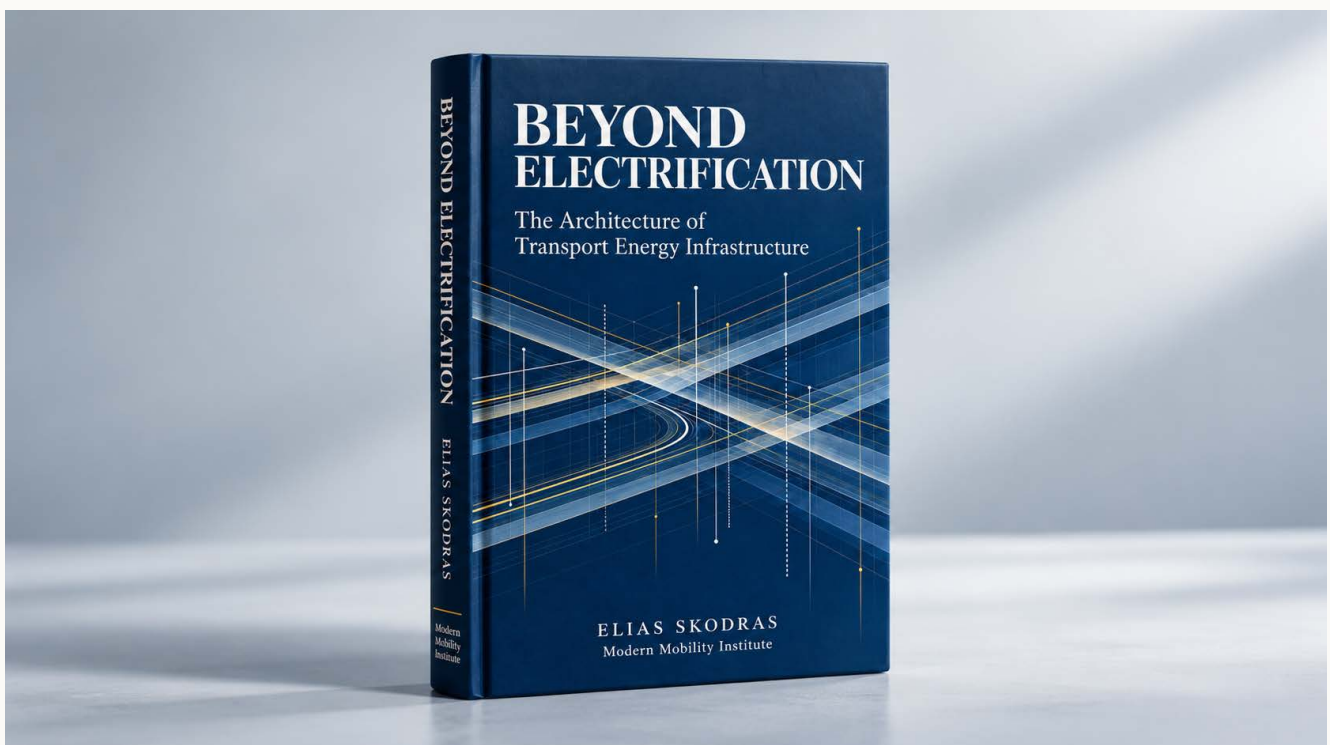
How resilient does the system have to be?

And who ultimately pays for it?

That is the part we are interested in.

UPCOMING BOOK

The Architecture of Transport Energy Infrastructure



DIMITAR ANGELOV

But Modern Mobility is still a commercial company. Where does research stop and business begin?

ELIAS SKODRAS

Where somebody has to actually build something.

Research can tell you what the problem is.

At some point somebody still has to engineer the system, bring the components together, structure the project and take responsibility for implementation.

That is Modern Mobility.

We are not consultants who hand over a report and leave. If a project survives the analysis, our interest is in engineering and implementation.

And this is also where people sometimes misunderstand our ecosystem. They see charging, storage, energy generation, digital systems, vehicle engineering, Kinectra™ and other technologies and ask why all these things sit together.

Because the problem sits together.

A port operator does not care that the charger comes from one industry, the battery from another, the grid connection from somewhere else and the software from a fourth supplier.

The operator wants the site to work.

And the grid remains a central part of that system. TEI is not about replacing it. It is about determining the strongest combination of grid capacity, local generation, storage, charging, load management and future expansion for a particular site.

So we look at the whole architecture.

That may include grid supply, local generation, storage, charging, site loads, digital control, vehicle platforms and third-party technologies. Depending on the project, we combine our own capabilities with specialist partners and established manufacturers.

But not every project needs everything.

The constraint determines the intervention.

If the grid is the problem, solve the grid problem.

If peak load is the problem, storage or load management may be the answer.

If the operating window is the problem, engineer around the operating window.

And if a technology does not improve the case, leave it out.

The infrastructure intervention has to fit the operation.

The operation does not exist to accommodate the technology.

DIMITAR ANGELOV

Vehicle engineering is still part of that ecosystem?

ELIAS SKODRAS

Absolutely.

But we do not need to pretend that Modern Mobility should become another conventional automotive manufacturer doing everything itself.

Our role is much more about the platform, the engineering and the integration.

India is a good example of how we see that ecosystem in practice.

We have established an office there and work with **SpeakingMindz** and **Manu Seth** as our partner in the market.

On the vehicle side, we are already discussing how our platform could be applied to last-mile mobility and potentially to other vehicle categories. Our engineering develops the architecture around the actual application together with automotive producers and the appropriate industrial partners.

But India is interesting to us for another reason as well.

Together with our partner, we are also developing the conversation around Kinectra™ and the wider TEI approach - looking at transport and infrastructure environments with recurring activity, identifiable electrical demand and a genuine infrastructure requirement.

That is why India is strategically interesting.

It allows us to look at both ends of the system:

the vehicles that require energy and the infrastructure that has to provide, manage and potentially generate part of that energy.

That is really what the Modern Mobility ecosystem means.

Not a catalogue of unrelated products.

A set of capabilities that can be combined around an actual operating problem.



DIMITAR ANGELOV

And where does Kinectra™ sit in all of this?

ELIAS SKODRAS

Kinectra™ raises a particularly interesting question:

Can existing transport activity become part of the local energy architecture?

It is an infrastructure-based energy-generation technology.

There is no intervention in the vehicle or drivetrain. It is not a recuperation system. And we are not talking about creating additional traffic in order to produce electricity.

The relevant questions are much more practical.

How much recurring traffic is already there?

Where is it concentrated?

Is the infrastructure suitable?

Is there meaningful electrical demand nearby?

Can the technology be integrated without interfering with the transport operation?

And do the economics work?

What I actually like about TEI is that it has made our approach to Kinectra™ more disciplined.

We built the methodology broadly enough that even our own technology has to earn its place.

If the answer is GO, we engineer it.

If it is ADAPT, we change the architecture.

If it is NO-GO, then it is NO-GO.

I would rather reject the wrong location than spend years trying to prove that a technology belongs somewhere it does not.



DIMITAR ANGELOV

That sounds more restrained than saying every road could become a power plant. Have you become more cautious?

ELIAS SKODRAS

More precise.

I still think the opportunity is enormous.

Look at what transport infrastructure actually contains: movement, land, electrical demand, operating assets and, increasingly, very substantial energy consumption.

Ports are electrifying equipment, fleets and terminal operations.

Airports are dealing with ground vehicles, charging, building loads, resilience and future expansion. Logistics sites have increasingly concentrated electrical demand and very limited tolerance for operational disruption. Road infrastructure has its own energy requirements and, in the right locations, may also create opportunities for local generation.

These are no longer isolated technology questions.

They are infrastructure systems.

And technologies such as Kinectra™ may allow suitable transport infrastructure itself to participate in local energy generation.

But that does not mean every road needs Kinectra™, every depot needs a battery or every charging problem needs local generation.

There is a big difference between a good idea and an investable site.

We are interested in the second one.

Infrastructure owners do not need another company telling them one technology solves everything.

They need somebody who understands the operating problem, the energy problem and the investment problem - and who is prepared to make a decision.



DIMITAR ANGELOV

| So what are you looking for now?

ELIAS SKODRAS

Give us the site where your electrification plan is already running into a real constraint.

A port where expansion creates an energy problem.

An airport where future charging and site demand begin competing for electrical capacity.

A logistics hub where the operating window makes charging difficult.

A fleet location where grid availability is becoming the bottleneck.

A road or transport infrastructure site where existing transport activity and local energy demand make Kinectra™ worth examining.

We do not need the easiest site. We need a real one.

There should be measurable transport activity, identifiable energy demand, suitable infrastructure, a responsible operator and a realistic route to implementation.

Then let us look at it properly.

Not a pilot designed mainly to produce a press release.

A real location with a real problem.

We analyse the transport requirement, the energy demand, the grid interface, the existing infrastructure, the possible technologies and the economics.

And then we make a decision:

GO. ADAPT. NO-GO.

If the case is strong, we move into engineering and implementation.

We are not asking a government or an infrastructure operator to believe in a concept. We are asking them to let us test one real location.

And we are not starting from zero. Kinectra™ is already operating under live 24/7 conditions, with real performance data behind it. Those sites are confidential, so we cannot publish where they are or disclose the details. We would protect a new partner's site with exactly the same discipline.

So the open question is no longer whether the technology works. It does.

The question is whether the case works here - on your site, under your operating conditions, with your numbers.

If it does, build it. Then replicate it.

ABOUT THE INTERVIEWER

Dimitar Angelov

Dimitar Angelov is an automotive journalist with a Master's degree in Media and Communications. His work has appeared in TorqueNews, TopSpeed, HotCars, Motorheads and Jalopnik.

ABOUT THE INTERVIEWEE

Elias Skodras

Elias Skodras is Founder & CEO of Modern Mobility, Chairman of Noventra Group and founder of the Modern Mobility Institute. He has worked in mobility for more than 25 years.