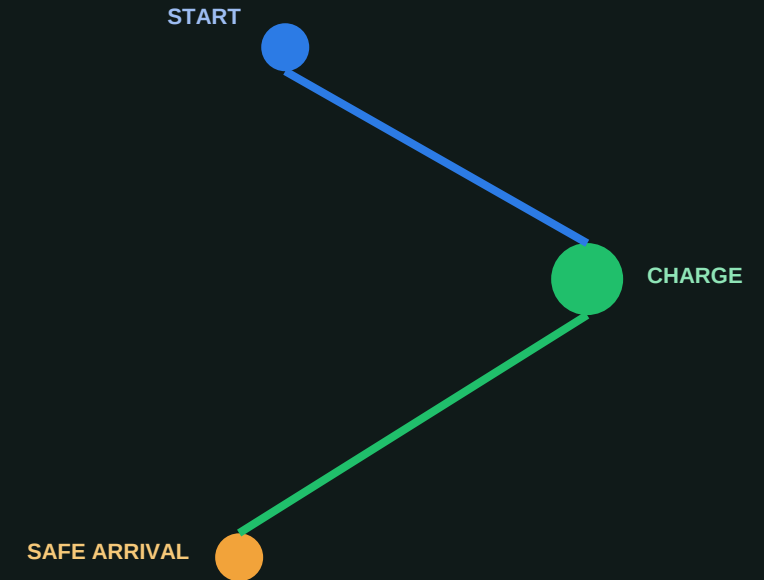




EV Fan makes the next charging decision before battery anxiety does.

A battery-safe charging and navigation experience designed for Cambodia's EV drivers—and the operators who keep station data trustworthy.



BATTERY-SAFE STOPS

Plan around reserve, range and connector fit

TRUSTED STATION DATA

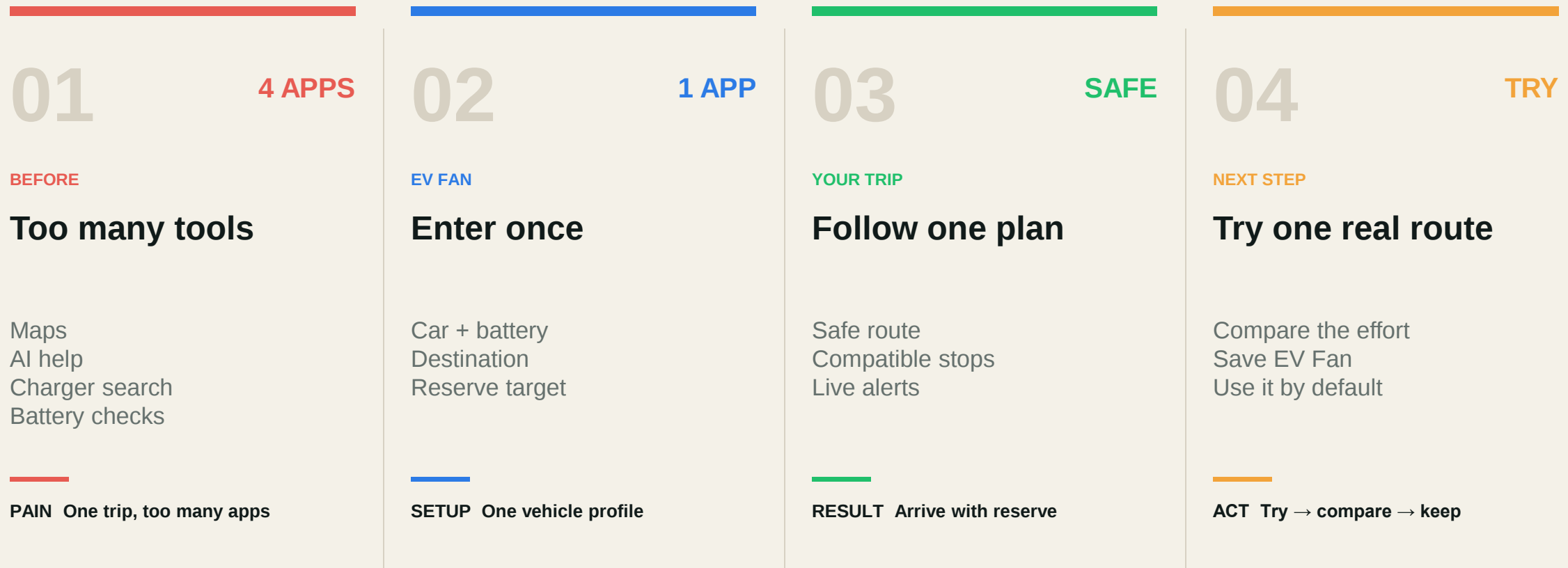
Keep provenance and unknown values visible

LIVE SAFETY GUIDANCE

Turn low battery into an immediate action

• WHY EV FAN

Four apps become one simple, safer EV journey.



• PAIN POINT

A long EV trip currently forces the driver to make five risky guesses.

DEMO PERSONA

Dara

Phnom Penh driver
40% battery · long trip

“I do not need every station. I need the right station before the battery becomes the problem.”

1

Will the real range survive traffic?

2

Is the next station active?

3

Does its connector fit my car?

4

How long must I charge?

5

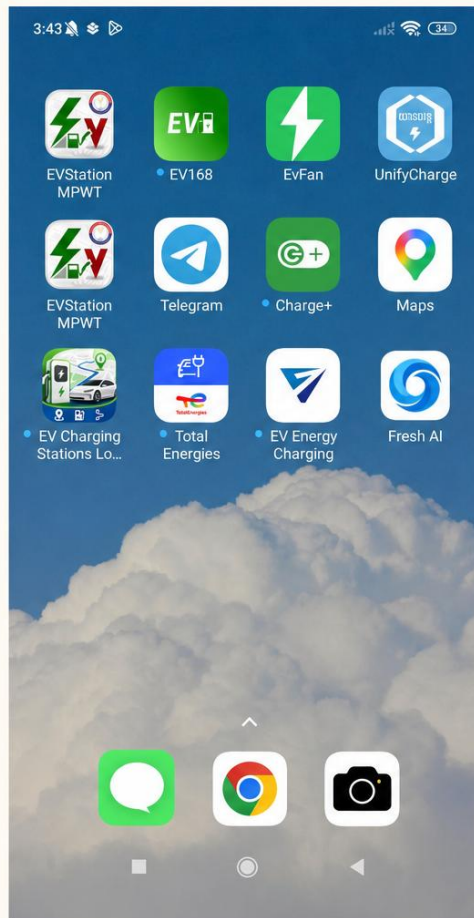
Can I finish—or return—with reserve?

Each guess is small. Together they create range anxiety—and an unsafe decision under pressure.

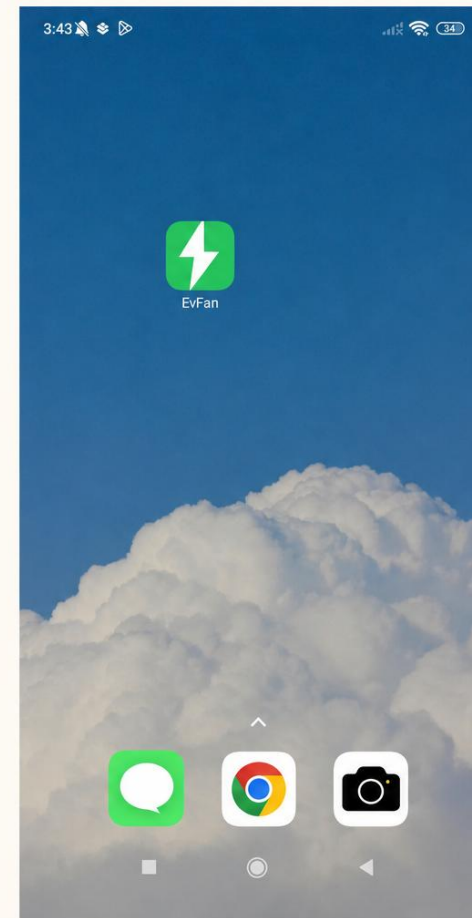
• ONE APP VALUE

Many EV apps before. One EV Fan journey after.

BEFORE • MANY EV APPS



AFTER • EV FAN



• DEMO STORYBOARD

One six-minute journey demonstrates the whole promise without a feature marathon.

01

0:45

FRAME THE RISK

Meet Dara at 40%

Set the destination and ask which uncertainty matters most.

ASK What would stop you from starting?

02

2:00

PLAN

Calculate a safe route

Use the car's range, battery, reserve, connector and round-trip choice.

SHOW Stops, charge plan, arrival battery

03

2:00

DRIVE

Let risk trigger action

Start navigation; show route-aware guidance and the low-battery alert.

SHOW Alert, map, voice, next stop

04

1:15

PROVE + LISTEN

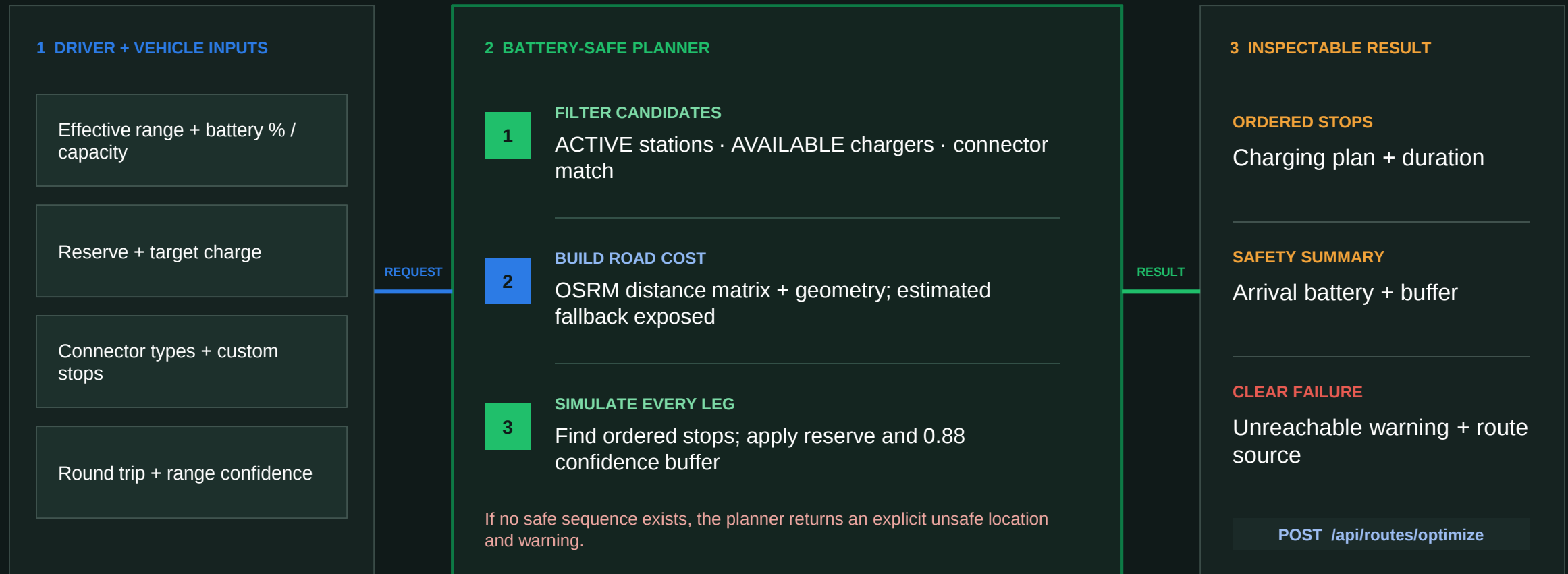
Inspect trust evidence

Open station provenance, admin operations and the verification ledger.

ASK Which assumption should we test next?

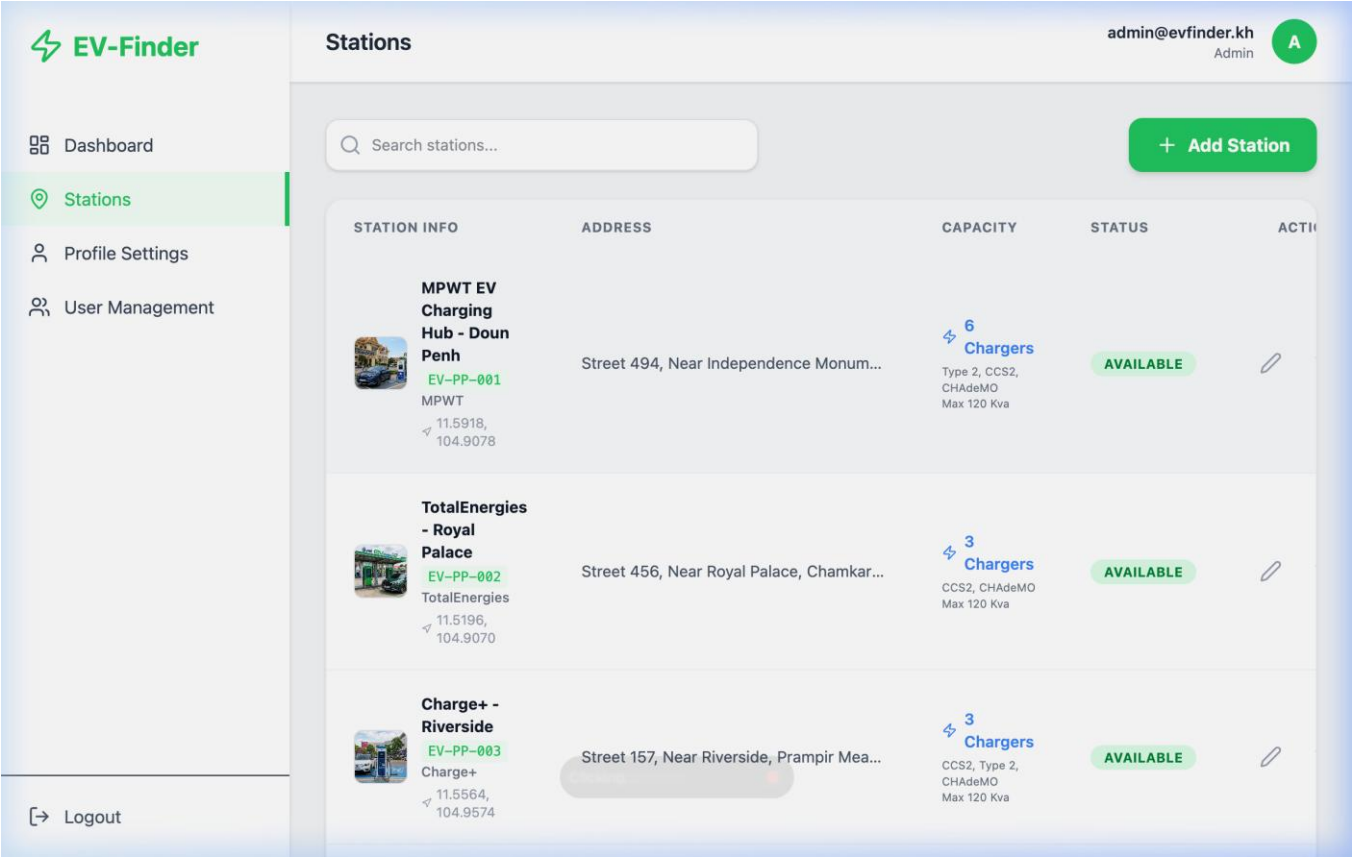
• PRODUCT IN ACTION

The route changes when the car, battery, reserve, or charger reality changes.



• TRUST THE STOP

A safe route is only as credible as the station data behind it.



104

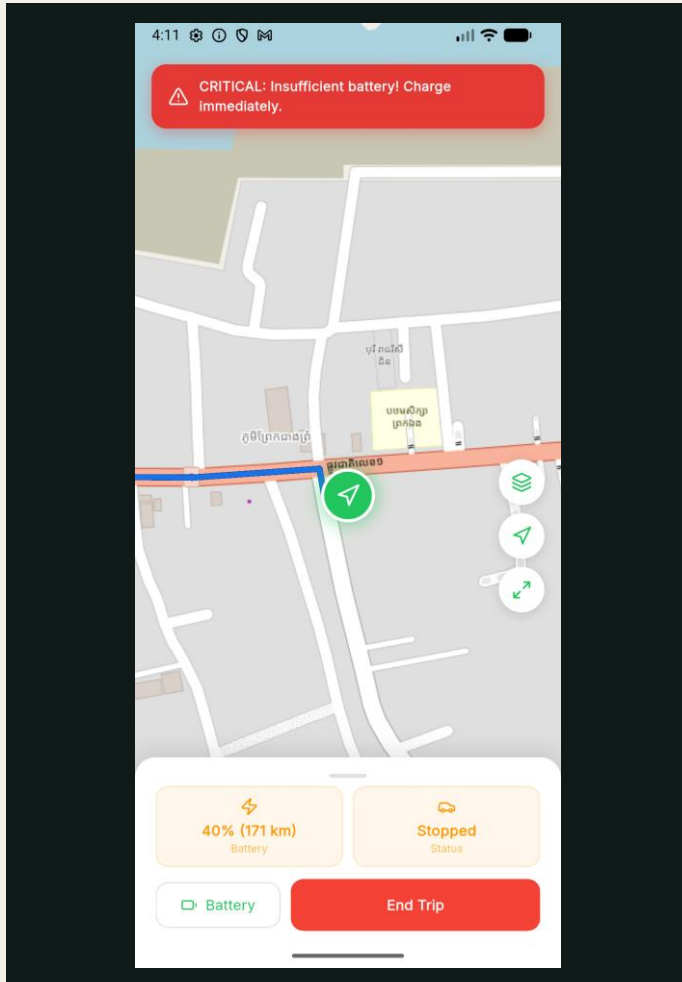
official 2025 records described by the project’s MEF importer

- 01 VERIFIED
MEF source · active
- 02 COMMUNITY VERIFIED
Detailed OSM evidence
- 03 PENDING REVIEW
Social / authorized web only

Unknown power and price values stay unknown—they are never invented for display or routing.

• LIVE PROTECTION

On the road, EV Fan converts battery risk into an immediate next action.



1

CRITICAL ALERT

Risk becomes explicit

A visible warning and voice prompt remove ambiguity when the battery margin becomes unsafe.

2

ROUTE-AWARE GUIDANCE

The map follows the real trip

GPS filtering, route snapping, look-ahead camera and speed-aware zoom keep navigation readable.

3

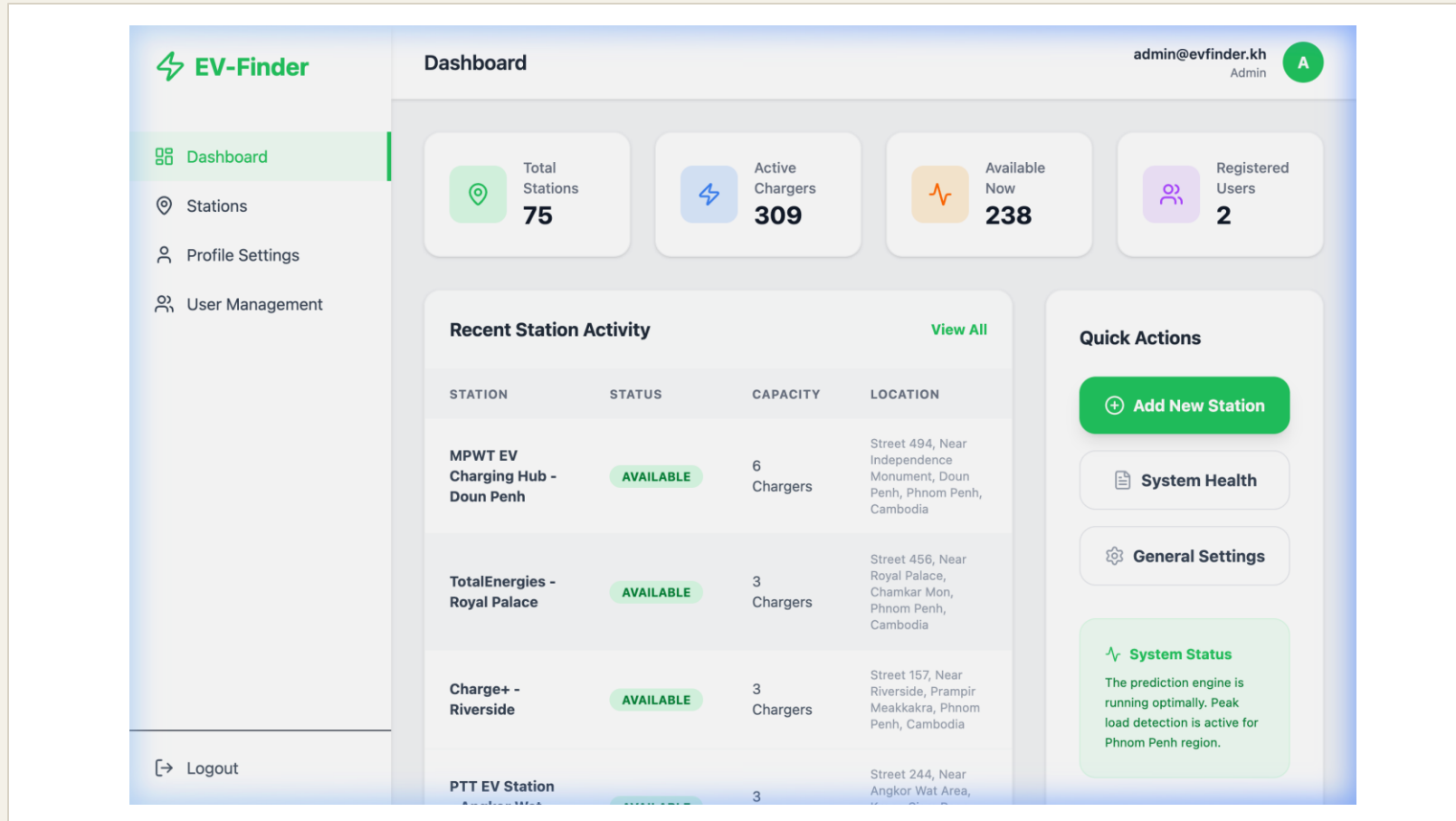
ACTION + STATE

The driver sees what to do next

Battery/range, trip status and the next safe charging stop stay in the same decision view.

• OPERATIONAL LOOP

The admin view closes the loop between station reality and driver guidance.



01

OBSERVE

Station, charger and user status

02

ACT

Add, update or disable owned records

03

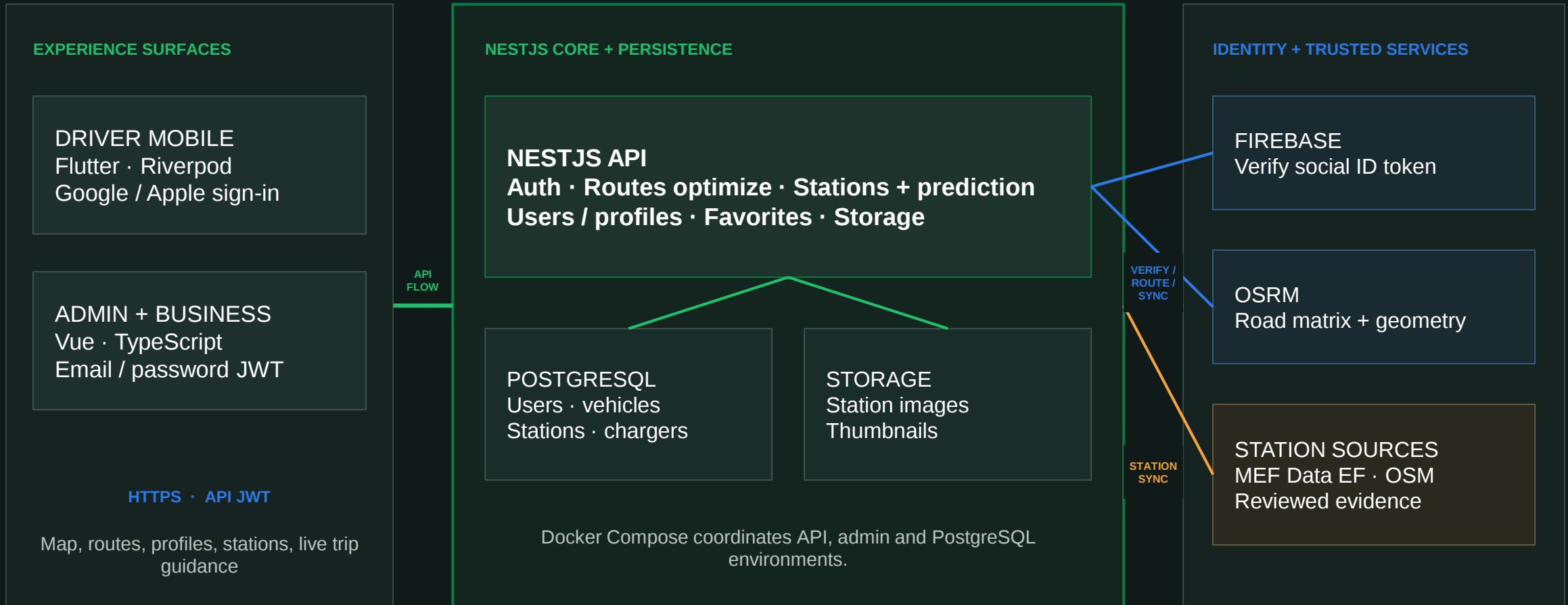
IMPROVE

Cleaner inputs produce safer route decisions

BUSINESS role: can modify only its own stations

• SYSTEM ARCHITECTURE Reliable No credential Leaking

One authenticated data flow connects the driver, operator, routing engine, and trusted sources.



• TRUST EVIDENCE

The critical journey is backed by 37 passing tests and clean builds—not a demo-only script.

37

automated tests passed

Verified in this workspace
02 Aug 2026

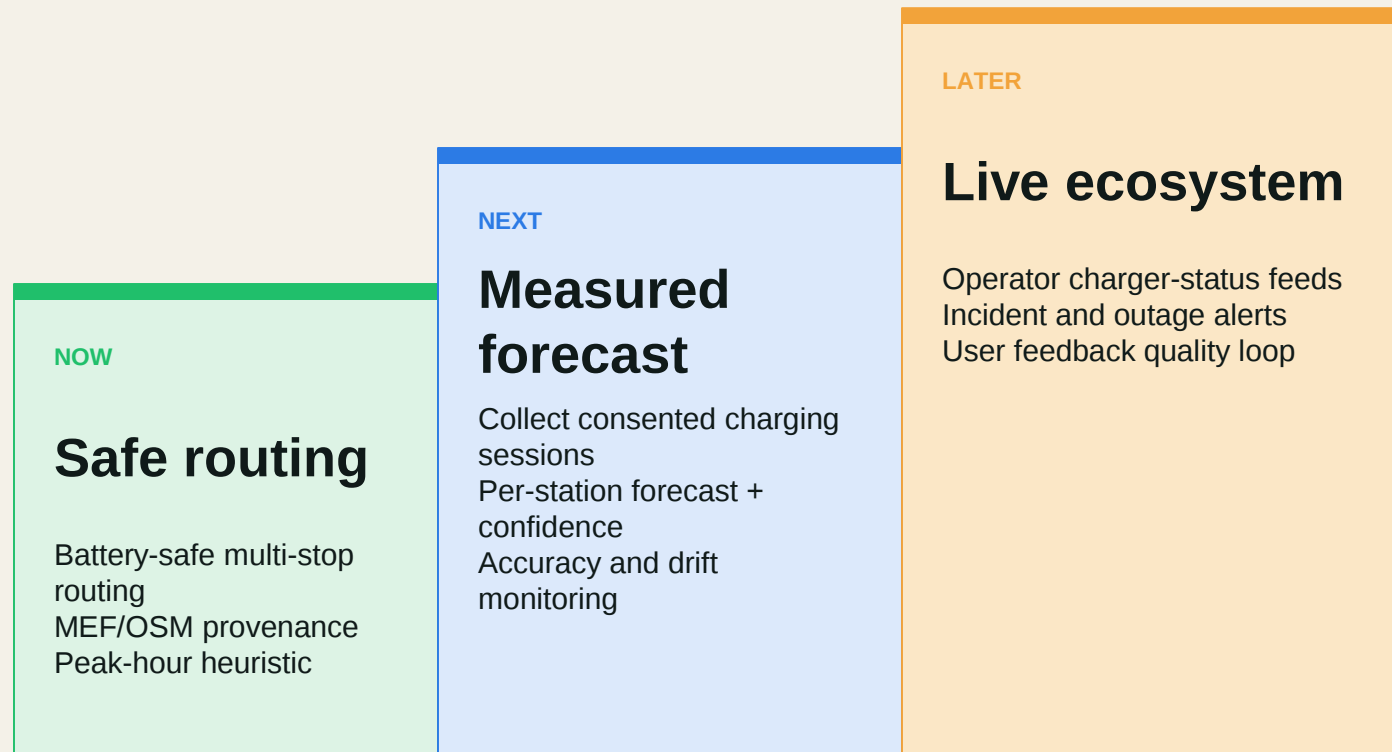
BACKEND	20 / 20	PASS	4 test suites · NestJS build passed
MOBILE	17 / 17	PASS	Flutter analyze: 0 issues
ADMIN	BUILD	PASS	Vue/TypeScript production build · 1,859 modules

WHAT THE SUITE ACTUALLY PROTECTS

ROUTE SAFETY	AUTH	STATION TRUST	NAVIGATION	APP
multi-stop + unreachable	Google / Apple restrictions	MEF / OSM provenance	GPS filter + route camera	configuration + smoke

• HONEST ROADMAP

Trust increases when heuristic availability becomes measured, monitored forecasting.



COMMON OBJECTIONS / CURRENT RESPONSE

What if no safe route exists?

Return an explicit warning and unsafe location.

What if OSRM is unavailable?

Use an estimated fallback and expose routeSource.

What if station evidence is weak?

Keep it pending; do not invent missing values.

Can one business edit another?

Role and ownership guards block the update.

Current truth: availability prediction remains a deterministic peak-hour heuristic; the trained ML claims from Phase 2 are not yet integrated here.

• **CALL TO ACTION** Demo In Real word

Try one real route. Compare the effort. Make EV Fan your default.

One vehicle profile connects navigation, AI guidance, charging decisions and live battery protection.

01 TRY

Plan the next journey

Enter the vehicle, battery, destination and reserve once.

02 COMPARE

See the difference

Compare app switching, charger confidence and next-step clarity.

03 KEEP

Save the safer workflow

Reuse vehicle settings, favourite stops and trusted routes.

ONE VEHICLE. ONE ROUTE. ONE SAFER DECISION.

Thank you