

Best-Practices for Streamlining DCFC Permitting

Southeast Florida Regional Climate Change Compact

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Types of Charging

Level 1

2 to 5 miles of range per hour of charging

Standard 120v AC Wall Outlet

Level 2

10 to 20 miles of range per hour of charging

Requires 208v electrical service and dedicated 40 amp circuit – the same kind used by a clothes drier or stove

DCFC

60 to 80 miles of range per 20 minutes of charging*

Requires three-phase 480V AC electric circuit

Needs to be mounted on an equipment pad

***Note:** Most existing DCFC stations are 50kW, however, new 350kW DCFC are capable of delivering 200 miles of range in 10 minutes.



DCFCs are Not Comparable to Gas Stations

Gas stations should not be used as a blueprint for how to permit DCFC.

Gas station's permits need to account for several features that DCFC do not, including that gasoline is a toxic substance that, if spilled or leaked, can get into waterways, groundwater, etc.

Gas stations are typically accompanied by a storefront, which requires HVAC and plumbing equipment, and gas pumps that require canopies and underground storage tanks.

DCFC are also typically added to existing developments, as an accessory use, whereas gas stations and their associated stores are typically stand-alone enterprises.





Choosing a Site for DCFC is Resource Intensive

Station developers consider many factors when selecting charging sites, such as:

- Traffic patterns;
- Proximity to major roadways;
- Safety;
- Nearby services (i.e. stores, coffee shops, etc.); and
- Appropriate lighting (i.e. well-lit at night).

Station developers also work with utilities to ensure adequate electrical infrastructure and an ability to connect the station to the grid. Electrical capacity and easements may limit charger placement at a site.

Once a site is selected, the station developer and site host enter into a contract, which often restricts or dictates the specific on-site location of the chargers.

All of this is done before an EVSE company applies for a permit.



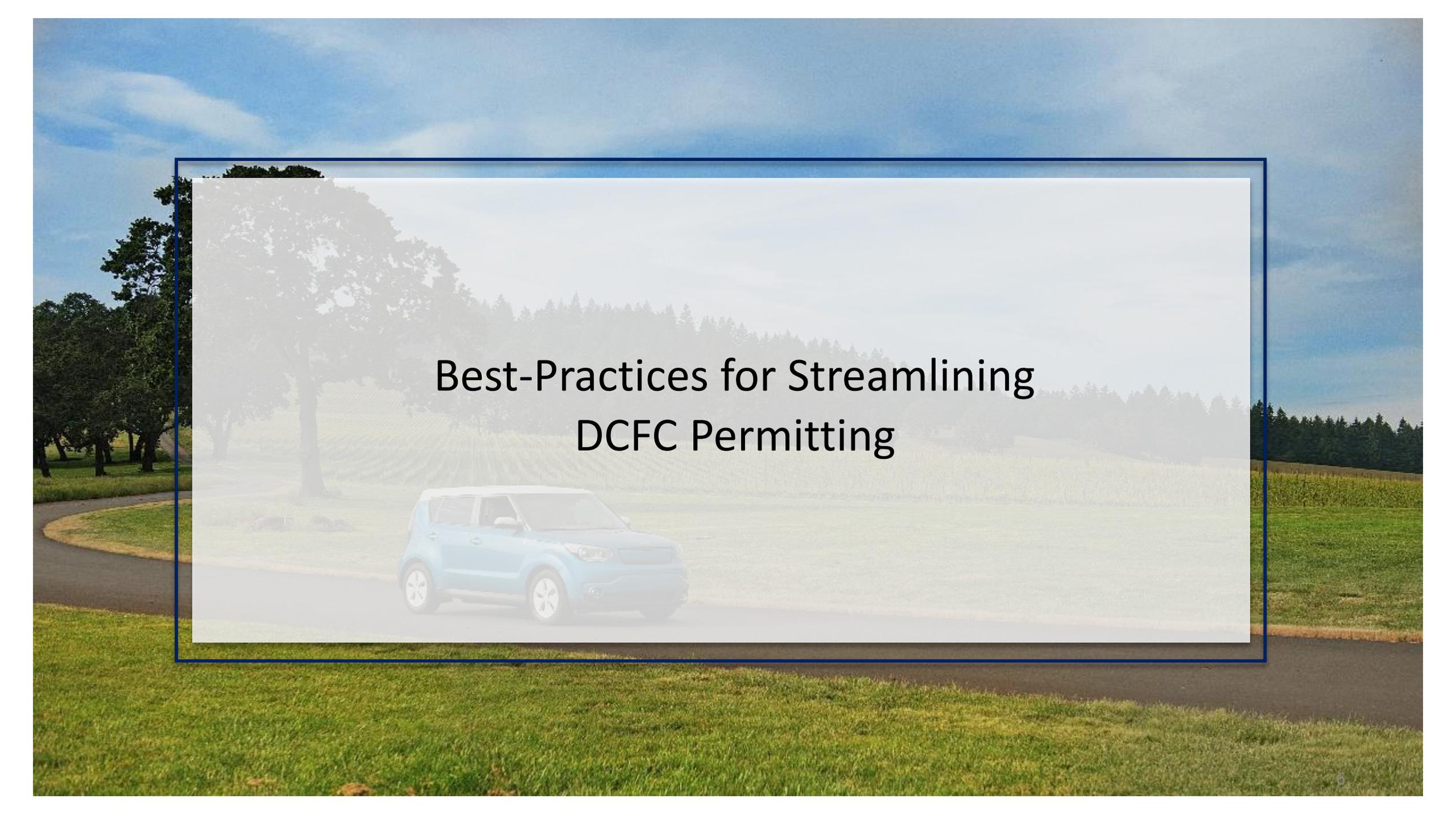
Photo credit: Steve Brady



Most local jurisdictions have **never** permitted DCFC stations

As a result, the permitting process for DCFC stations is often:

- Undefined
- Resource intensive
- Lengthy
- Variable from place to place

A scenic landscape featuring a blue car on a paved road that curves through a green field. In the background, there are trees and a blue sky with light clouds. A semi-transparent white rectangular box is overlaid on the center of the image, containing the title text. The entire scene is framed by a thin blue border.

Best-Practices for Streamlining DCFC Permitting

Standardize the permit review and inspection process



- Classify DCFC stations as an accessory use that do not trigger zoning review and clearly identify any exceptions.
- Provide concurrent reviews for building, electrical, etc.
- Clearly establish the grounds for denying a building permit (e.g., California limits permit reviews to health and safety issues).
- Develop inspection checklists specifying what needs to be inspected and when, that the project will be inspected to ensure consistency with issued permits, documents to bring, and who should be present.



Make the permitting process transparent

- Create facts sheets to clearly identify required application materials, where to find applications, timelines, fees, and points-of-contact.
- Feature this information prominently on website.

Offer options to submit permit applications electronically

- Provide forms, ideally fillable PDF applications that accept electronic signatures, online; or
- Provide application forms on website and allow applications to be submitted via email.





Count EV charging spaces as parking spaces

- Update ordinances to clarify that spaces for charging stations count toward minimum parking requirements.
- To incentivize the deployment of charging stations, some jurisdictions count EV charging spaces as more than one parking space for zoning purposes.



Develop expertise and share knowledge

- Offer pre-permitting meetings during the siting phase.
- In larger jurisdictions, designate an “EVSE Expert,” who is the point person on EV charging applications.
- Coordinate with other jurisdictions in your region to share best practices and create consistency.

Thank You

Whitepaper available at:

<https://www.nescaum.org/documents/dcfc-permit-streamlining-whitepaper-final-5-14-19.pdf/>

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