

While installing a solar system is the first step in going solar, maintenance is also a big part of keeping the system running well. That's where the concept of truck roll comes in. But these instances in which a technician needs to be dispatched can be expensive endeavours.

Hoymiles has microinverter distributors across the globe, helping to reach local installers before the products safely arrive and are securely installed for the end-user. Reducing truck rolls and ensuring efficiency is therefore of great importance. Generally speaking, there are ways to reduce truck rolls in the first place. Though some are unavoidable, most organisations can significantly reduce the number of times truck rolls are necessary, and in turn, improve the profitability and efficiency of their field service.

#### What is a truck roll?

Simply put, a truck roll is when a technician is dispatched to a customer's location to carry out a service. This could be anything from troubleshooting a minor issue to completing a repair.

Most customer support queries can be handled over the phone or via online chat, and indeed, these are often the preferred methods of contact, both for customer convenience and for company profitability. However, there are times when phone or internet assistance isn't enough. In these instances, a technician needs to be physically sent to site to help.

The most common technical issues demanding

truck rolls are those that require hands-on troubleshooting, like electrical repairs or physical installations that are best handled by a professional. For PV installations, truck rolls can happen when any of the components in a system malfunction or break down.

### What are the hidden costs of a truck roll?

Truck rolls are, in general, extremely inefficient. While they can certainly solve a customer's problem, they also result in wasted time and money for the organisation.

In particular, truck rolls result in added labour, customer churn and vehicle costs. They also increase customer churn while decreasing customer satisfaction.

#### **Labour costs**

The time the technician spends traveling to and from customer locations represents a significant added cost of labour. This is especially true if they need to make multiple trips in order to resolve an issue. In addition, in contrast to telephone or online support, there is also a higher cost associated with the time staff spend at the job site. Technicians, as opposed to support specialists, are often professionals with years of experience in their field, and expect to be compensated accordingly.

# **Opportunity costs**

The aforementioned labour costs are compounded by the fact technicians are often pulled away from other tasks to complete a truck roll. If the organisation is small or has to make do with limited manpower, this can be a great concern. Every hour a technician spends traveling to and from a customer location is an hour they're not available to work on something else, and these costs can add up.

#### Vehicle costs

Vehicle costs are another hidden expense associated with truck rolls. Cars, vans, and trucks require gas, maintenance and insurance, all of which can add up over time. And if a technician is using their personal vehicle for a truck roll, which is common in smaller companies, this can result in added inefficiency because of time spent writing rebate requests and completing other paperwork.

### **Customer churn**

Lastly, poor customer satisfaction outcomes often associated with truck rolls can lead to higher customer churn.

In the real world, customers are often less forgiving than when using telephone or chat

support; scheduling, delays, and logistical issues can lead to delayed service for customers. And unfortunately, even a small delay increases the odds that a customer will take their business elsewhere.

#### Five ways to reduce truck rolls

Fortunately, truck rolls can be minimised in just a few simple steps.

#### Take the system to module-level monitoring

For PV systems, it can be quite annoying if the underperforming module can't be identified, especially with string systems, where each string of PV modules shares one inverter and centralized systems, where one inverter is installed for the whole array of modules.

Hoymiles specialises in module-level power electronics (MLPE), so its microinverter can easily break the whole system down to module level. This is extremely efficient because, with the help of its S-Miles Cloud platform, users are able to review how each PV module is performing. By accessing data in a secure and user-friendly way, valuable insights can be generated for support teams and technicians, so owners can make informed decisions about their solar system's operation and management.

This way, either the technical issue can be detected at an early stage and solved immediately or the wealth of information can help technicians analyse any problems efficiently and thus one visit to the location will do. With enough information on hand, data can be collected to identify what is wrong, without having to visit the site.

# Remote visual support as an alternative

Remote visual support (RVS) refers to the use of technology to provide a technician with a view of the customer's device or system, without needing to be onsite. This can be done in a number of ways, including using video chat, screen-sharing software, or even just photographing the issue.

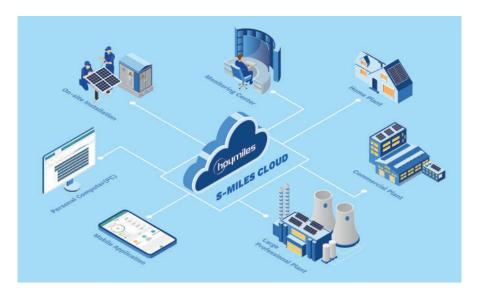
RVS is often an excellent alternative to dispatching a technician, as it removes the majority of travel expenses and ensures the technician's time is spent solving the issue. This also benefits the customer, as they're able to resolve the problem without having to wait for a technician to physically arrive.

At Hoymiles, when PV microinverters are not functioning well, users need to do small tests, and the results will be carefully diagnosed so that any problems can be solved on a remote basis, instead of sending technicians to the location.

# **Optimise scheduling**

Instead of eliminating truck rolls altogether, pre-existing ones can be optimised to reduce both labour and vehicle costs in truck rolls.

A rule of thumb, try to schedule appointments



so technicians visit customers in the same geographic areas. This will minimise the amount of time they need to spend traveling, which can make up the lion's share of expenses.

There are several ways to reduce truck roll costs. One popular method is bundling customers together into 'clusters,' which are groups of customers located within 50 or perhaps 100 miles of each other.

The cluster distance can be tailored to suit the nature of the company. For example, a retailer might have clusters that are much smaller than a manufacturer.

#### Use a comprehensive knowledge base to consolidate information

A comprehensive knowledge base is an essential tool for any technician. It should include not only step-by-step instructions for resolving common issues, but also information on that customer's particular device or system, including model numbers. software versions, and past service calls.

It's an unfortunate reality that many truck rolls require repeated visits to the customer's location, as the technician attempts to resolve the issue. A comprehensive knowledge base can help reduce this need, as it allows the technician to troubleshoot and resolve common issues from afar.

Depending on the size of the company, this may take the form of enterprise resource planning (ERP) software, a self-service portal, or a cloud-based knowledge management system. Whatever the method, a comprehensive knowledge base is an essential part of any technician's toolkit.

#### Automate ticket routing and assignment

If technicians are still being assigned manually, it's time for an upgrade. Automating ticket routing and service call delegation is faster, more cost-efficient, and scalable. It means using technology to automatically determine which technician should be assigned to a particular service call, based on their skills,

availability, and location.

This, of course, helps ensure that tickets are routed to the most appropriate technician, which can significantly reduce the number of truck rolls and their associated expenses. Rather than bloating truck roll costs with long onsite visits, the technician can get it done right and in a shorter period of time.

#### Empower customers with self-service tools

Self-service tools allow customers to troubleshoot and resolve common issues on their own, without needing to contact a support team. Whether through help articles, FAQs, or instructional videos, the idea behind self-service is to give customers the information they need to help themselves. Though not every problem is solvable without dedicated technical support, the burden on service staff can be significantly reduce by letting customers help themselves.

# How much can be saved by reducing truck rolls?

The exact savings to be made by reducing truck rolls will vary depending on the specific organisation and the services it provides. However, if truck rolls can be reduced by even 20% across the entire field service operation, the savings can be significant.

Assuming an average cost of a truck roll is around \$250, and the number of service calls per week in a given region is 10, a 20% reduction in truck roll frequency translates to over \$26,000 annually. That's a significant chunk of change that can be reinvested back into the business, or used to improve customer service and satisfaction in that area.

One final note; considering the time and money invested in problem-solving on the user's part, when all signs show that the problem cannot be solved remotely, Hoymiles would arrange a product replacement based on the warranty policy, as it always wants the best cost-effectiveness for its customers.

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