通向**eMobility**之路
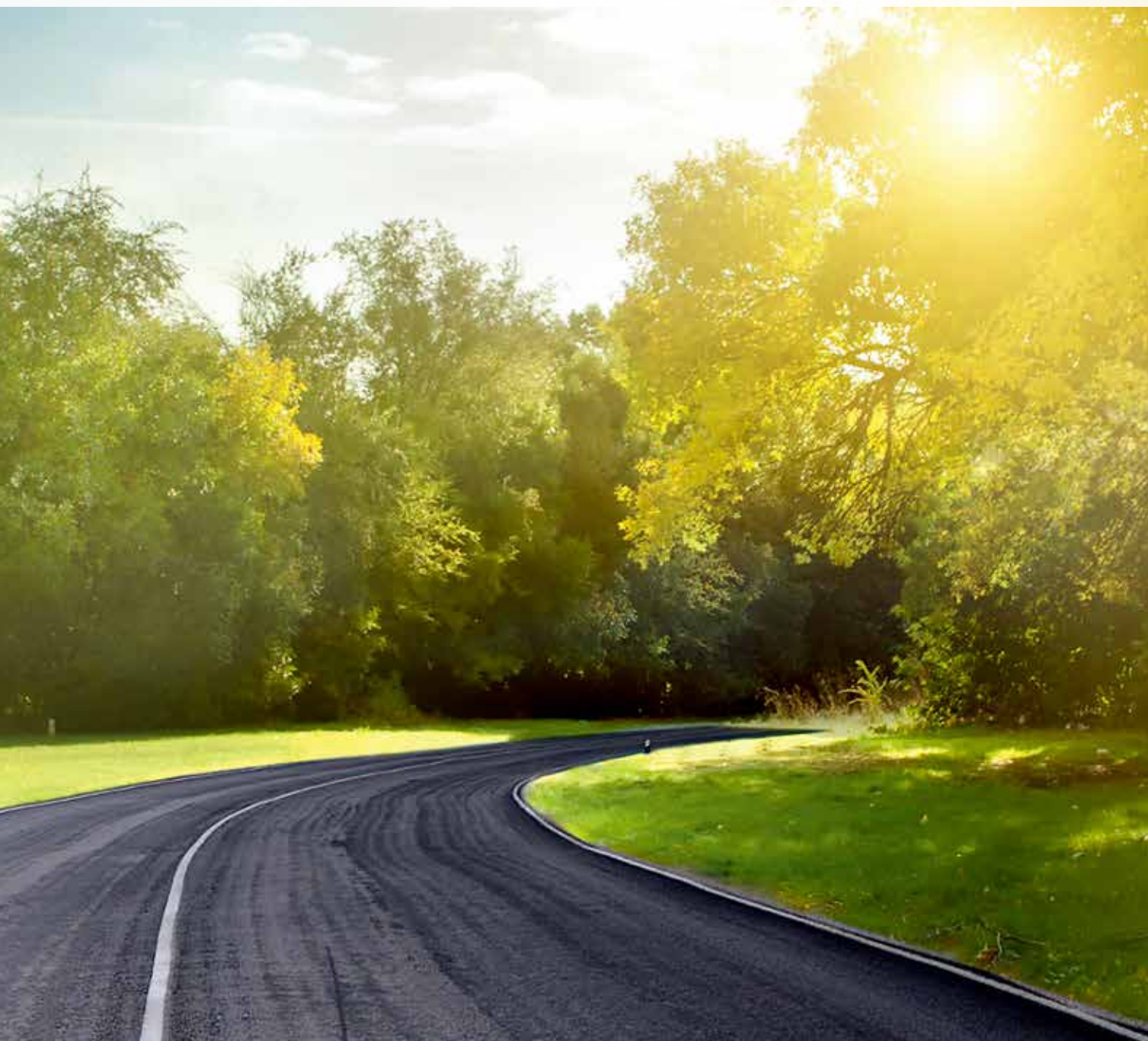## —— 基于博世eMobility软件包

Bosch Software Innovations

The future drives electric
Environmentally friendly, create business opportunities

未来驱使电动发展
环保，友好
创造业务新机遇

eMobility is gradually becoming the alternative technology of choice for passanger car and light delivery vehicles, whether this involves vehicle fleets run by corporations and institutions or car owners in the private sector. Keeping this ever growing number of vehicles on the road calls for a nationwide charging infrastructure that is both simple and cost-effective to set up, manage and expand.

eMobility将逐渐成为客车和轻型运输车选择的替代技术，无论这涉及公司机构或是私营车主运营的车队。保持道路上车辆数量的不断增长需要一个全国性的充电基础设施，同时该设施的设置、管理及扩展既简单又节约成本。

Bosch Software Innovations provides your company, public institution or municipal authority with a comprehensive "software as a service" solution which enables you to run your own charging infrastructure for electric vehicles – the eMobility Starter Package. The software is the control center for your individual eMobility platform, consisting of electric vehicles, charging stations, mobility services, renewable power, fleet management and billing systems. Starting with you, as operator, everyone involved benefits as users of the platform, and the environment does too.

博世软件创新提供给贵公司、公共机构或市政部门一个全面的"软件即服务"解决方案，这使得您能够运营您个人的电动汽车充电基础设施——eMobility Starter Package。该软件是您个人eMobility平台的控制中心，它包括电动汽车、充电站、汽车服务、可再生能源、车队管理和计费系统。作为经营者，从您开始，涉及到的每个人都将作为平台用户而受益，同样也有利于环境保护。

Good reasons for getting into eMobility:

▶ Positive corporate image thanks to environmentally friendly, customer-oriented service portfolio

▶ Opens new business potential by extending your core business with electromobility services

▶ Increased brand awareness and access to new customer groups by providing an "energy filling station" for staff and customers

▶ Lower running costs for your own vehicle fleets

▶ Active contribution to protecting the environment through reduced emissions from fleets and customer vehicles

▶ Reduced noise pollution thanks to quiet electric drive

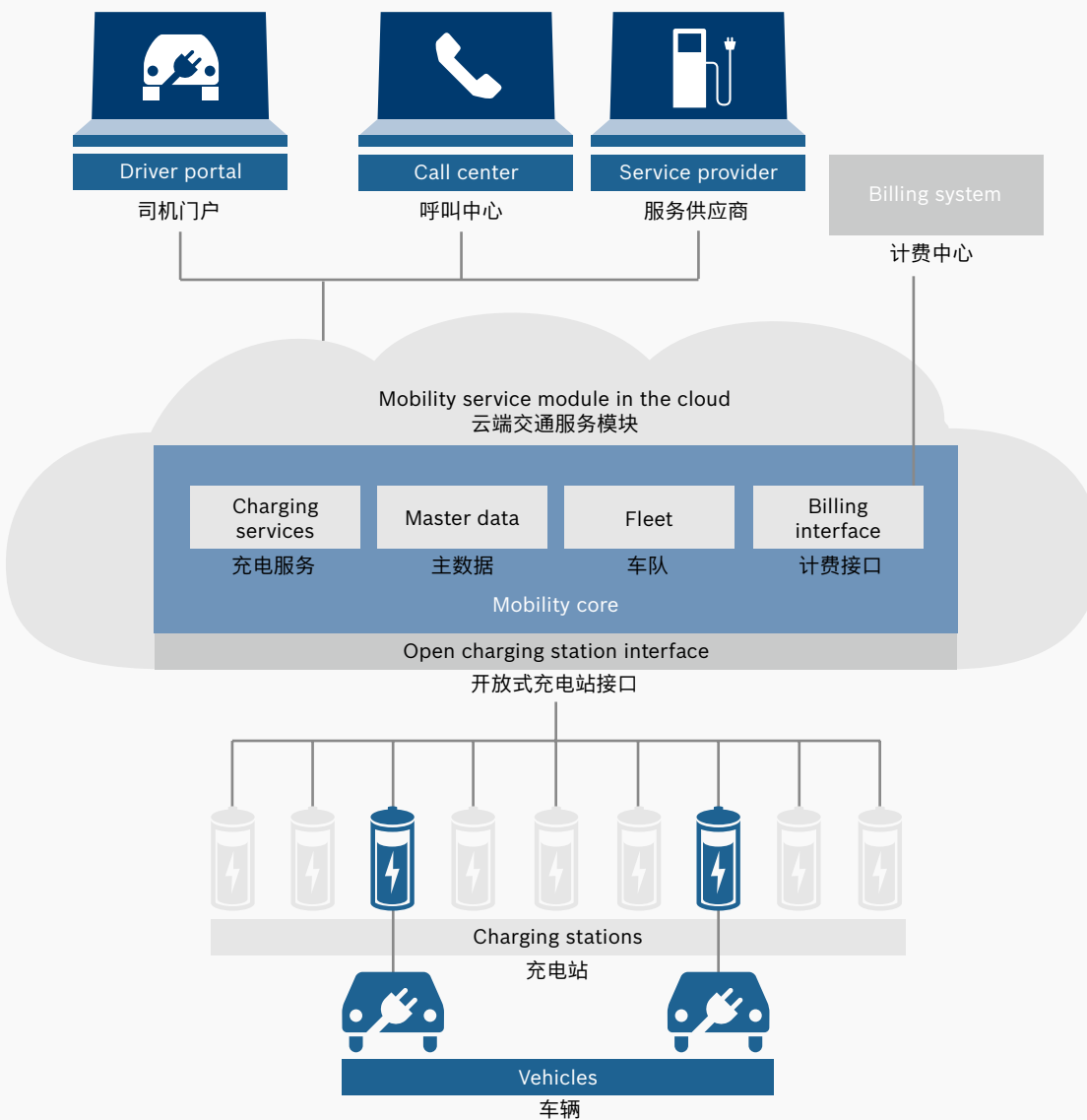▶ Increased staff motivation and identification with the company

进入eMobility的充分理由：

▶ 由于使用了环保的、面向客户的服务组合，您将拥有积极的企业形象。

▶ 通过增加电动服务来扩展您的核心业务，从而发掘新的业务潜力。

▶ 通过为员工和客户提供一个"能量加油站"，提升品牌认知度，增加新客户群进入的渠道。

▶ 减少您车队的运营成本。

▶ 通过减少车队和客户车辆的排放，为保护环境做出积极贡献。

▶ 采用安静的电力驱动，减少了噪音污染。

▶ 提高了员工积极性以及对公司的认同。

eMobility Starter Package

The eMobility Starter Package integrates users, service providers, vehicles, charging stations and services on a cloud-based software platform.

eMobility Starter Package将用户、服务供应商、车辆、充电站和服务整合在一个基于云的软件平台。

Driver portal
司机门户

Call center
呼叫中心

Service provider
服务供应商

Billing system
计费中心

Mobility service module in the cloud
云端交通服务模块

Charging services
充电服务

Master data
主数据

Fleet
车队

Billing interface
计费接口

Mobility core

Open charging station interface
开放式充电站接口

Charging stations
充电站

Vehicles
车辆

Easy and quick start
eMobility Starter Package: all you need for your success

简易快速的开始
eMobility Starter Package：为您的成功提供所需

The eMobility Starter Package is a software solution for running and managing a charging infrastructure for electric vehicles. It can be used as a convenient cloud-service, eradicating the need to invest in IT capacities of your own. As the service provider, you are able to manage your complete charging infrastructure and customer data online, and can make it accessible to your customers.

eMobility Starter Package是一个运营并管理电动汽车充电基础设施的软件解决方案。您可以将它作为一个方便的云服务，不再需要自己投资IT技术。作为服务提供商，您可以在线管理整个充电基础设施和客户数据，并使客户可以轻松访问。

The eMobility Starter Package enables you to set up eMobility infrastructure services with minimal effort, and to run these cost-efficiently from the very first charging station onwards. This gives you the opportunity to spark interest and initiate an eMobility market in your area, or to take a targeted approach to developing existing structures further.

eMobility Starter Package使您能容易地设置eMobility基础设施服务，而且从前方最初的充电站开始，就奉行成本节约的原则运行。这让您有机会发展您的兴趣，在您的领域内启动eMobility市场，或者采取针对性方法，进一步发展现有的结构。

The eMobility Starter Package offers many advantages

- Simple, fast and cost-effective entry through software-as-a-service
- The reliable and safe operational system behind the Bosch Software Innovation solution saves incurring additional costs and reduces complexity; there is no investment required for additional IT resources
- User-friendly thanks to intuitive operation
- Cost-effective and centralized set up, management and remote maintenance of charging stations using internet technologies
- CRM functions facilitate the management of customer data and communication with specific customer target groups, while supporting detailed reporting and process optimization
- Incredibly safe investment as the system can always easily be extended by additional users, charging stations, functions and services
- Maximum flexibility offered by the ability to connect with other charging stations from certified manufacturers and with external systems offering billing and fleet management solutions via open interfaces
- Attractive rates for various contract periods
- Optimized planning thanks to short-term contracts – starting from 12 months
- Increased fleet efficiency through dynamic fleet scheduling and routing

eMobility Starter Package 带来众多优势

- 通过软件即服务，提供简单、快速、经济的入口。
- 由博世软件创新的解决方案支持的运行系统可靠安全，它节约了额外的成本，并降低了复杂度；它也不需要额外投资IT资源。
- 直观的操作更加人性化。
- 通过使用互联网技术，经济地、集中地设置、管理和远程维护充电站。
- CRM功能在支持详细报告和流程优化的同时，促进了客户数据管理以及与特定的目标客户群的交流。
- 作为十分安全的投资，系统拥有良好的扩展性，能支持新增用户、充电站、功能和服务。
- 通过连接其它认证厂家的充电站，以及通过开放接口连接提供计费和车队管理解决方案的外部系统，它拥有最大的灵活性。
- 为不同合同期提供有吸引力的费率。
- 短期合同促进了计划的优化——短期合同指从12个月开始。
- 通过动态车队计划和路线规划提高车队效率。

The driver portal
Starting point for all users

驾驶员门户
所有用户的出发点

To gain access to the charging infrastructure and mobility services, each user must first register in the driver portal, where personal user profiles are also stored and managed. Drivers are only entitled to use the charging infrastructure after you as service provider have activated their account. Drivers identify themselves at charging stations using a secure method of authentication such as an RFID card. After the driver is identified and authorised the charging process is automatically started.

为了获得使用充电基础设施和汽车服务的权利，每个用户首先必须在驾驶员门户中注册，该门户存储管理这些个人用户信息。驾驶员只有在服务供应商激活其账户后才有权使用充电基础设施。驾驶员在充电站使用一个安全的认证方法来识别自己，如RFID卡。在驾驶员身份被识别认证后，充电流程自动启动。

Driver portal services:

Search
Drivers have access to a live map (Google Maps) that shows them which charging stations are currently available, occupied or out-of-order.

Reservations
Drivers are able to reserve their preferred charging station for a specific period, during which time it appears as unavailable to other drivers. This prevents unnecessary waiting periods and raises customer satisfaction.

Navigation aid
Drivers can view the location of the nearest charging station in the online-portal and via a smartphone app. They are also provided with a suggested route from their current location to the preferred charge spot.

Overview of consumption and costs
The energy consumed during meanwhile completed charge processes and the remaining charging time are summarized whenever required and presented in a user-friendly form. Users can at any time generate an overview of their consumption history.

驾驶员门户服务：

搜索
驾驶员可以访问一个实时的地图（谷歌地图），显示当前哪个充电站是可以使用的、已占用的或是发生故障的。

预约
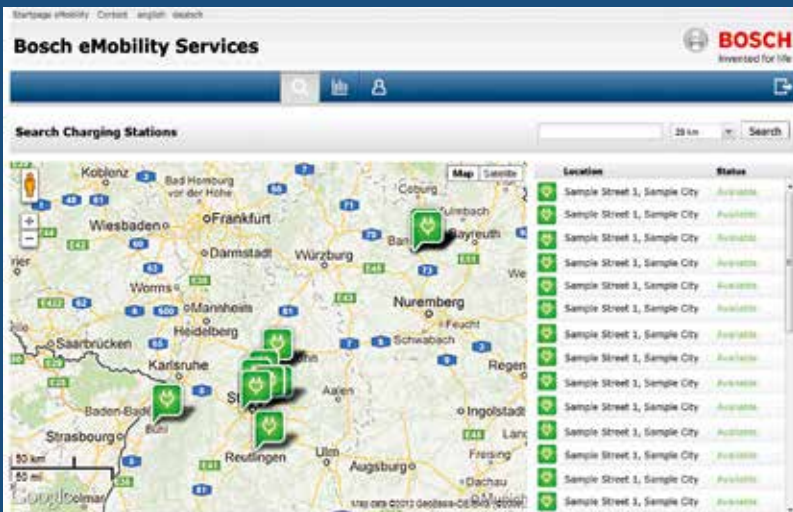驾驶员可以在一段特定时间内预订他们理想的充电站，在这段时间内该充电站对其他驾驶员而言是不可用的。这避免了不必要的等待时间，提高了客户满意度。

导航辅助
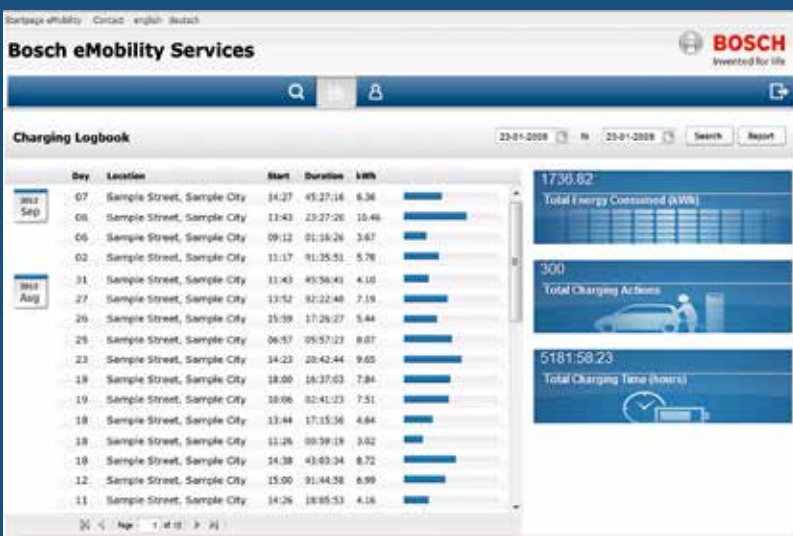驾驶员能够在在线门户上或是智能手机应用中查看离自己最近充电站的位置。同时，它也提供给驾驶员一条从当前位置到目标充电站的路线。

消费和成本概览
能源在整个充电过程中消费,剩余的充电时间被累计下来,无论何时需要均可使用,并以人性化的形式呈现。用户可以在任意时间查看其消费历史的概览。

Convenient search and map-facility showing availability of charging stations

便捷的搜索功能，地图设备显示可用的充电站。

Detailed representation of charge volumes and times

详细地显示充电量和时间。

The service provider portal
Your convenient control center
服务供应商门户
您便捷的控制中心

The service provider portal is the control center for your charging infrastructure. It allows you to see which driver has charged their vehicle how often and for how long and at which charging station. It gives you an overview of all available and occupied charging stations, allows you to set up new charging stations and enables you to manage all customer data securely.

服务供应商门户是充电基础设施的控制中心。您可以通过它查看到每个驾驶员对汽车进行充电的频率和充电时间以及所使用的充电站。它提供所有可用和已占用的充电站概览，您还可以启动新的充电站，并安全管理所有客户数据。

Detailed analysis of customer and consumption data means you can address your existing clients in a more targeted way and develop individual services tailored to each client's needs. Beyond this, you'll gain valuable information for attracting new customers and for communication with specific customer target groups.

You can export data such as billing-related information in CSV format, for example, and make revisions as required by opening the file in Microsoft Excel.

对客户和消费数据的详细分析意味着您可以更有针对性地满足您现有的客户需求，并针对每个客户的需求制定个性化服务。除此之外，您能够获得有价值的信息来吸引新客户，与特定目标客户群交流。

您可以用CSV格式，导出如计费等相关信息的数据，并可以在Microsoft Excel中打开，按照需要作适当的修正。
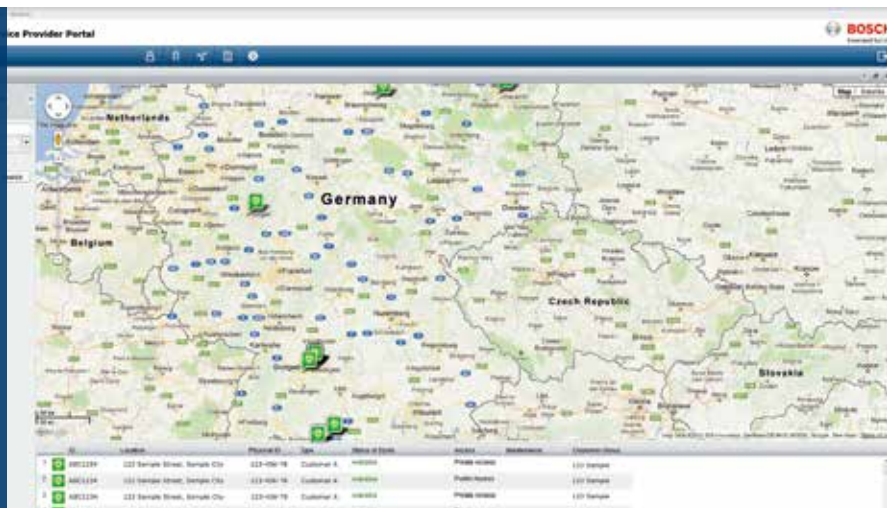
Possible evaluation criteria:
▶ Name of driver
▶ RFID card number
▶ Meter-ID
▶ Address of the charging station
▶ Start time, end time and date of charging process
▶ Meter reading at beginning and end of the charging process
▶ Charged kWh

支持的评估条件：
▶ 驾驶员姓名
▶ RFID卡号
▶ 仪表ID
▶ 充电站地址
▶ 充电过程的开始时间、结束时间和日期
▶ 在充电过程开始和结束时的表计读数
▶ 充电量kWh

Direct online-access to all charging stations

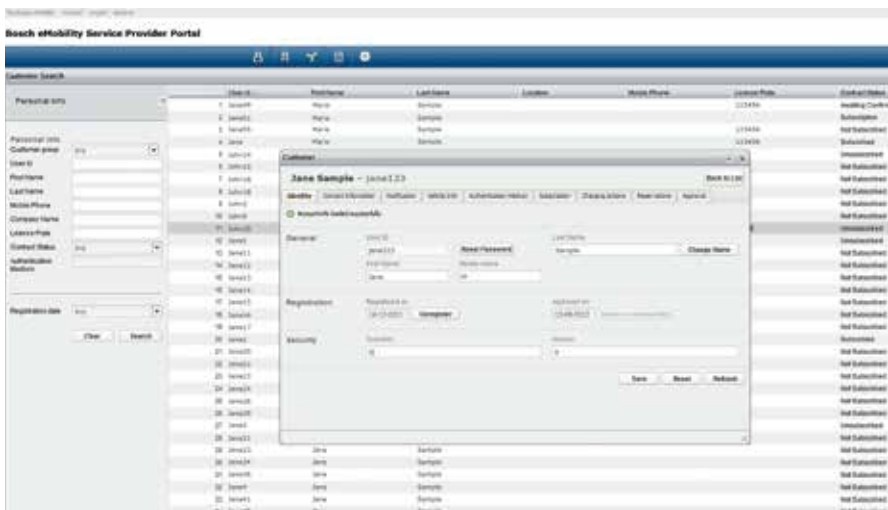直接在线访问所有充电站。

Develop new business potential

Combined business models enable you to create additional incentives for customers to use your charging infrastructure, such as combining purchase and charging time accounts.

开发新业务潜力

复合的业务模式能够激励您的客户使用充电基础设施，如将购买和充电时间账户相结合。

Billing information is exported in itemized form (quantity, time, identity) via a data interface into e.g. ERP, accounting and controlling systems like SAP, where the data can be processed.
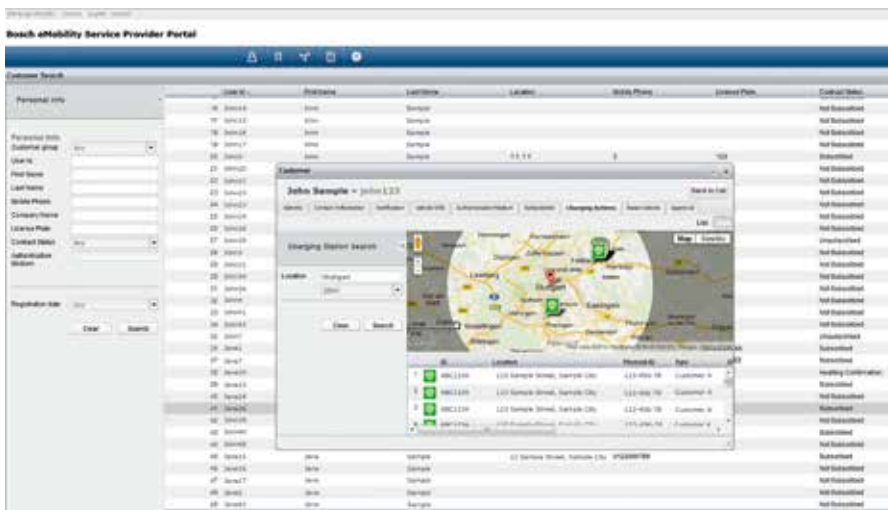
计费信息通过数据接口以逐条记录的形式（数量、时间、身份）输出到ERP、会计及控制系统中（如SAP），在这些系统中数据可以被处理。

Keep track of all customer data and contract information

记录所有客户数据和联系方式

Analyze your customers according to criteria such as individual charging processes

根据个人充电过程等条件分析您的客户

Efficient management of master data
有效地管理主数据

In the "Master Data Management" section you can define the basic settings for using the service provider portal and adapt these if necessary:

在"主数据管理"部分，您可以自定义服务供应商门户的基本设置，如若必要可更改以下项：

▶ Standardized starting point (map section) on the Google Map
▶ Roaming settings
▶ SMS provider for sending text messages to the user
▶ Add and deletion of charging stations from different manufacturers

▶ Time zones
▶ Definition and management of price plans
▶ Add and deletion of specific vehicle types

▶ 在谷歌地图上标准化起始点（地图部分）
▶ 漫游设置
▶ 发送文本消息给用户的SMS供应商
▶ 添加和删除来自不同厂商的充电站

▶ 时区
▶ 价格计划的定义和管理
▶ 特定汽车类型的添加和删除

Your best-fit entry into eMobility
进入eMobility最佳入口

Bosch Software Innovations offers you various options within its eMobility Starter Package that enable you to organize your eMobility infrastructure according to your own individual needs.

在eMobility Starter Package中，博世软件创新提供给您各种不同的选择，这使得您可以根据个人的需求来规划eMobility基础设施。

Easy Charging (shared cloud): Just get started

The easy charging option means you can become an eMobility service provider simply, quickly and cost-effectively. As a client you are given your own part of an existing ecosystem and are able to set up and manage your own customer groups. You can decide who is to be assigned responsibility for infrastructure management and driver administration based on the organizational units of your established business model.

Professional Charging (dedicated cloud): Your start as a service provider

The professional charging option allows you to run your charging infrastructure as a service provider and enjoy optimal participation in the growing market for eMobility. In contrast to the easy charging option, you yourself are able to add and manage further service providers. This puts you in the position of being able to build up your own ecosystem independently, to acquire external interested parties or further departments within your own company, and to join these up into one big charging infrastructure network if you wish.

Optimized Fleet: intelligent fleet management

Our effective fleet management module serves as the perfect complement to your Starter Package, and helps you to use your fleet of vehicles more flexibly and cost-effectively.

Maximum flexibility: individual solutions for all requirements

You have your own vision of the eMobility solution and charging infrastructure you wish to set up? Ask us, we are always happy to advise you.

Tel. +86-21-2218-1952
info-cn@bosch-si.com

简易充电（共享的云）: 作为起步

简易充电选项意味着您可以轻易、快速、节约成本地成为一个eMobility服务供应商。作为一个客户端，您可以得到现存生态系统中您个人的部分，设置并管理您自己的客户组。您可以决定由谁负责基础设施管理，由谁负责基于您建立的业务模式组织单元进行驾驶员管理。

专业充电（专用云）: 作为服务供应商开始

专业充电选项使您能够作为服务供应商运营自己的充电基础设施，并且在不断成长的eMobility市场中成为最佳参与者。与简单充电相反，您自己可以添加并管理其它的服务供应商。这使您能够独立建立自己的生态系统，对外部感兴趣的单位或公司内部更多部门，如果您愿意的话可以将他们加入到一个大的充电基础设施网络中。

优化车队: 智能车队管理

我们有效的车队管理模块是您Starter Package的完美补充，帮助您更加灵活、经济地使用车队。

最大灵活性: 针对所有需求的个人解决方案

若您对eMobility解决方案有任何设想或是您想设置充电基础设施？请询问我们，我们永远乐意为您服务。

Tel. +86-21-2218-1952
info-cn@bosch-si.com

Europe
Bosch Software Innovations GmbH

Ziegelei 7
88090 Immenstaad
Germany
Tel. +49 7545 202-300
Fax +49 7545 202-301
info-de@bosch-si.com
www.bosch-si.de

中国
博世（中国）投资有限公司

上海市长宁区福泉北路333号
电话：+86-21-2218-1952
传真：+86-21-2218-2388
邮箱：info-cn@bosch-si.com
网站：www.bosch-si.com

America
Bosch Software Innovations Corp.

161 N. Clark Street
Suite 3550
Chicago, Illinois 60601/USA
Tel. +1 312 368-2500
Fax +1 312 268-6286
info@bosch-si.com
www.bosch-si.com

Asia
**Bosch Software Innovations
c/o Robert Bosch (SEA) Pte Ltd**

11 Bishan Street 21
Singapore 573943
Tel. +65 6571 2220
Fax +65 6258 4671
info-sg@bosch-si.com
www.bosch-si.sg

BOSCH

www.bosch-si.com