

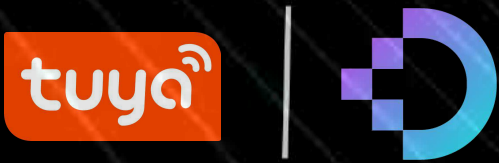
# Tuya Commercial Lighting Solution

Smart lighting solution based on  
Tuya AI+IoT Platform



# The Objective of Commercial Lighting Solution

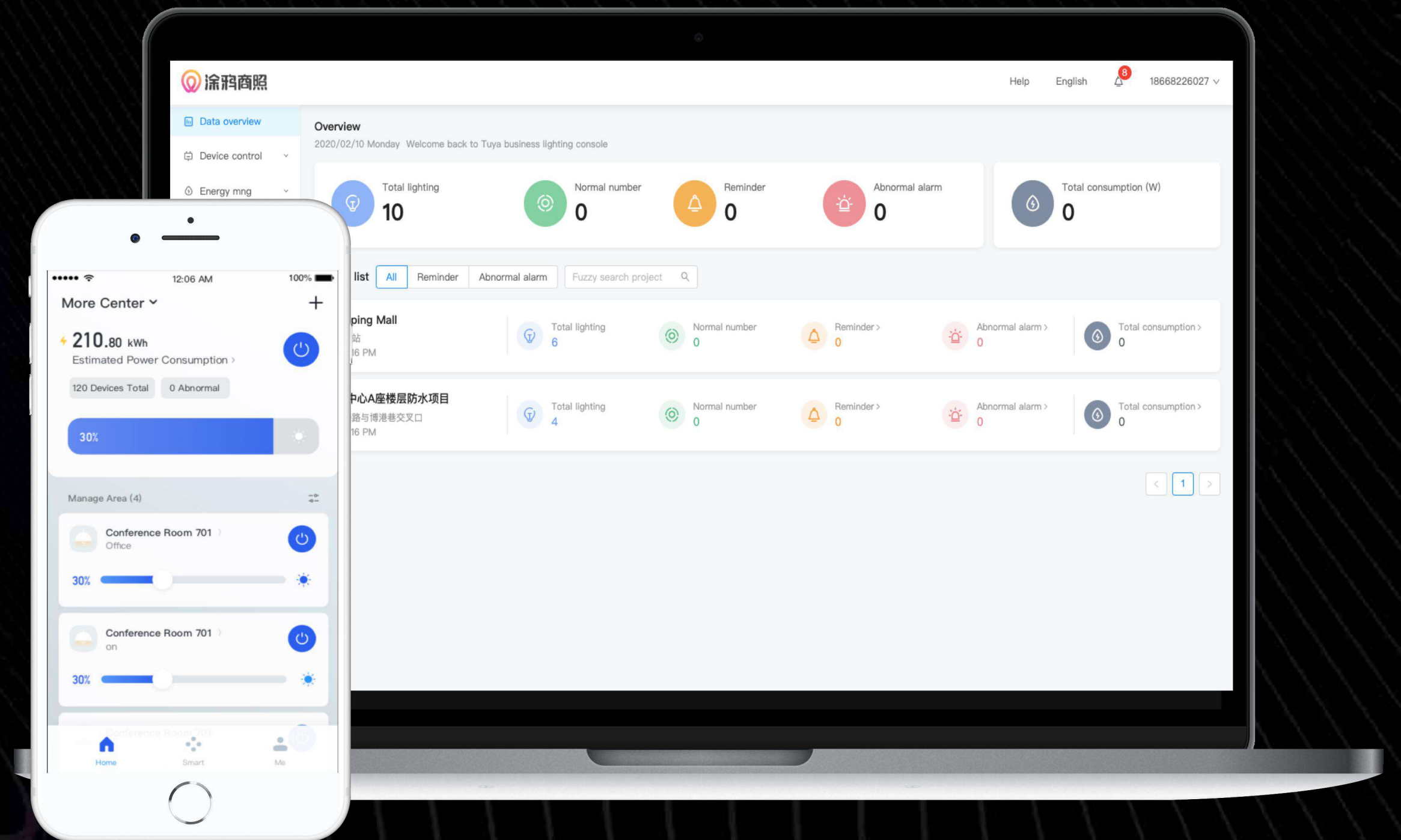




# Tuya's Commercial Lighting Solution

Tuya CL (Commercial Lighting) solution is a complete IoT control system that works for both new installations and retrofit projects. It is a one-stop solution for hardware devices, control software and installation management.

The solution we provide enables customers to monitor the operation and maintenance needs of all devices through a graphic user interface. With built in reporting and system insights, businesses are able to identify and implement strategies to reduce operation and maintenance costs.



# Main Functions of Tuya's Commercial Lighting Solution

- **Energy Management**

- Create actions and scenes that can be automatically executed to implement energy-saving strategies.
- Link single devices or group actions with sensors, schedules, sunrise and sunset times, weather conditions, etc.
- View, compare and analyze the power consumption of devices and groups by day, month or year.

- **Device Control**

- View and control devices from a map of the lighting layout.
- Monitor device conditions including, status, operation time, energy consumption and life expectancy
- Automatic alarms when devices change to “abnormal status” and notification to maintenance team.
- Streamlined installation and project management through Tuya's installation and commissioning app.

- **Human Centric Lighting**

- Easily configure groups of light fixtures to sync with circadian rhythm protocols. The system will automatically adjust the CCT and brightness of the fixtures throughout the day.



# Advantages of Tuya Commercial Lighting Solution

## Plug-N-Play Solution:

No R&D required which allows for a quick go to market strategy.

## Compatible with Multiple IoT Protocols:

Bluetooth mesh, Wi-Fi, Zigbee, Sig mesh, NB IoT etc. Soon will be able to connect with KNX Bacnet.

## Digital Management:

Intuitive graphic user interface for monitoring devices and power consumption across multiple projects and locations.

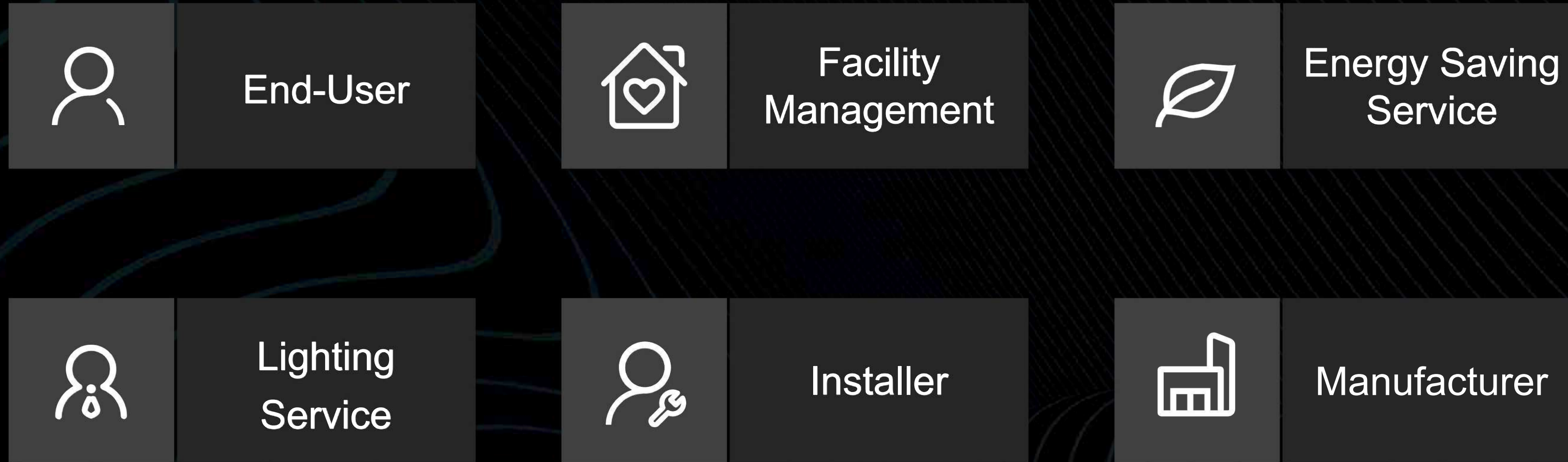
## Flexible Eco-System:

In addition to lighting, Tuya's open platform can integrate Security, HVAC, Blinds, and 100's of other product types.

## Value-Added SaaS:

Tuya offers a wide variety of SaaS solutions for more complex IoT capabilities.

# Customer



# Application



- Exhibition Center
- Museum
- Library
- Gym
- Airport
- Train Station



- Office
- Parking Area
- Hospital
- School
- Factory
- Warehouse



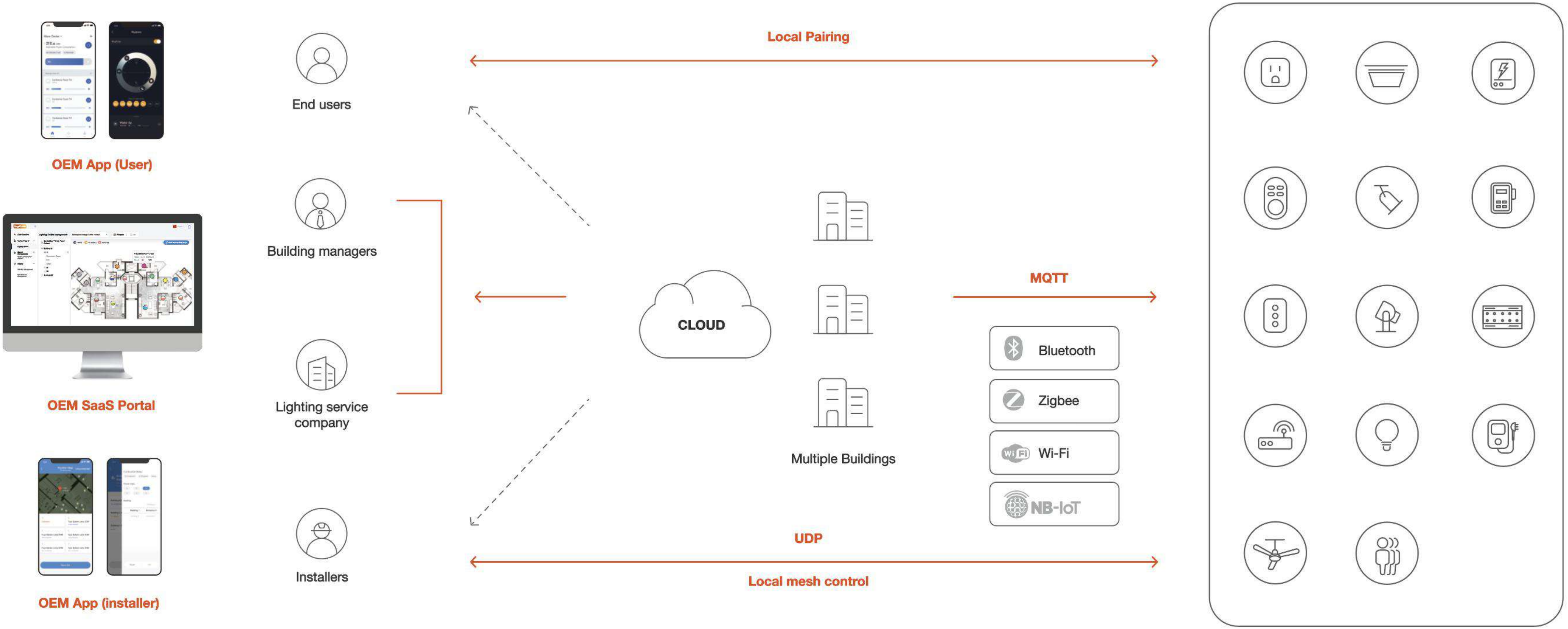
- Food
- Supermarket
- Fashion Store
- Chain Store
- Gas Station-Mall
- Hotel
- Restaurant

# Outdoor

(Under development)

- Zone
- Park/ Square
- Road
- Tunnel
- Facade
- Bridge
- Historical
- Stadium

# Tuya Commercial Lighting System Structure Integrate Multiple Protocols





# Tuya CL System Structure: Integrate Multiple Device Types

## Main Device



Gateway



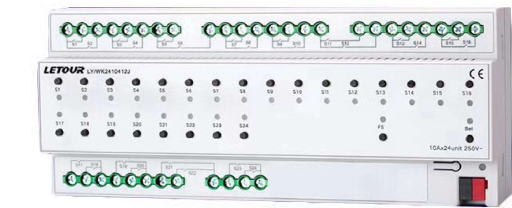
Smart Luminaire



Smart Driver

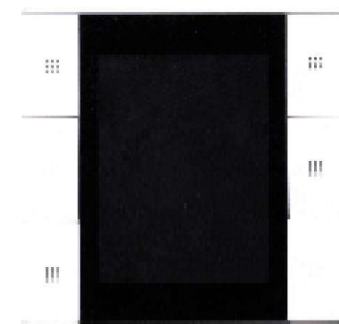


Smart Convertor



Centralized Switch

## Corollary Device



Wallbox/Scene Panel



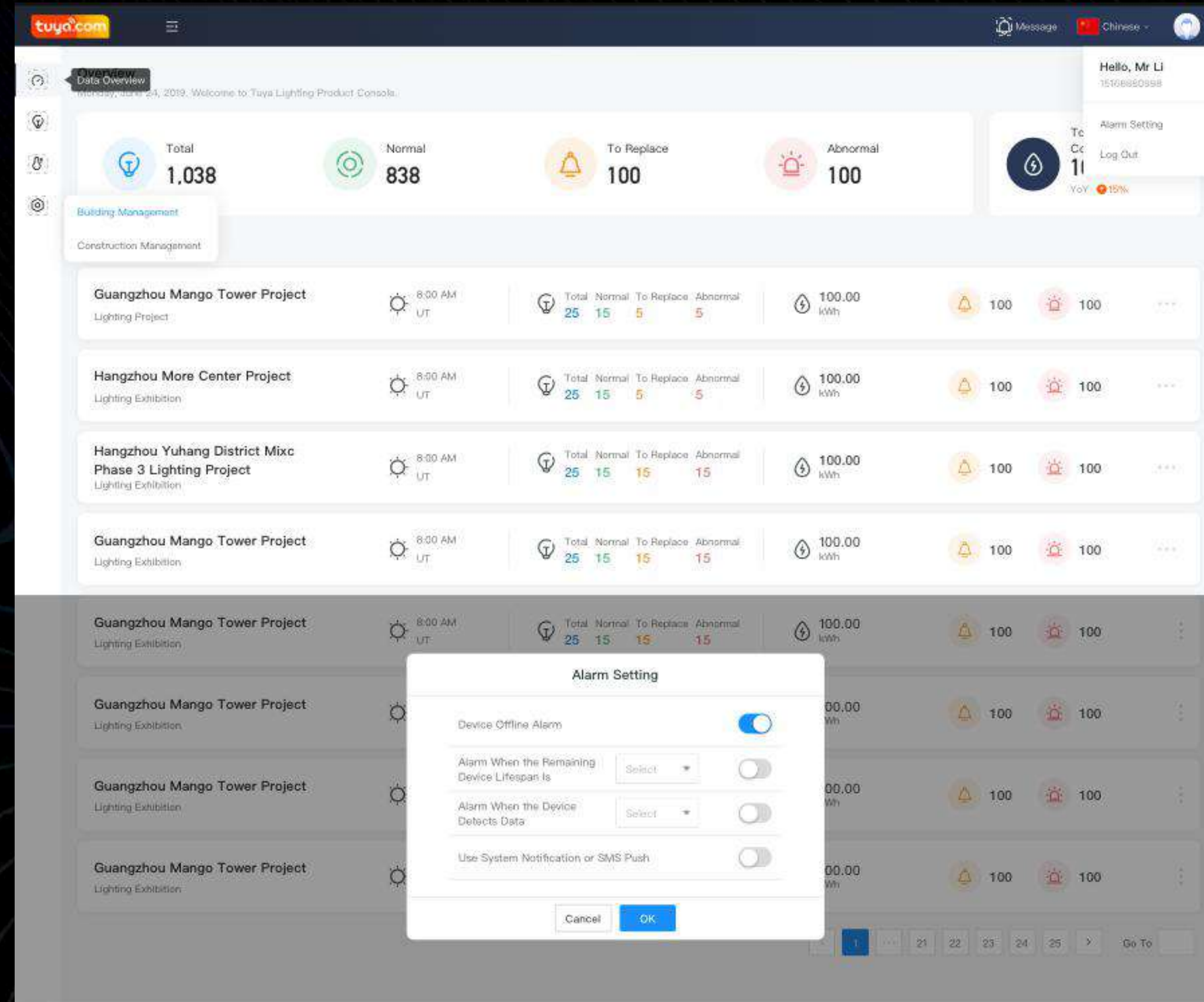
Sensor



Remote

# Tuya Pro SaaS Data Overview

- Project summaries
- Device status and information
- Energy consumption
- Maintenance notification
- Abnormal status alerts
- Building addresses and weather

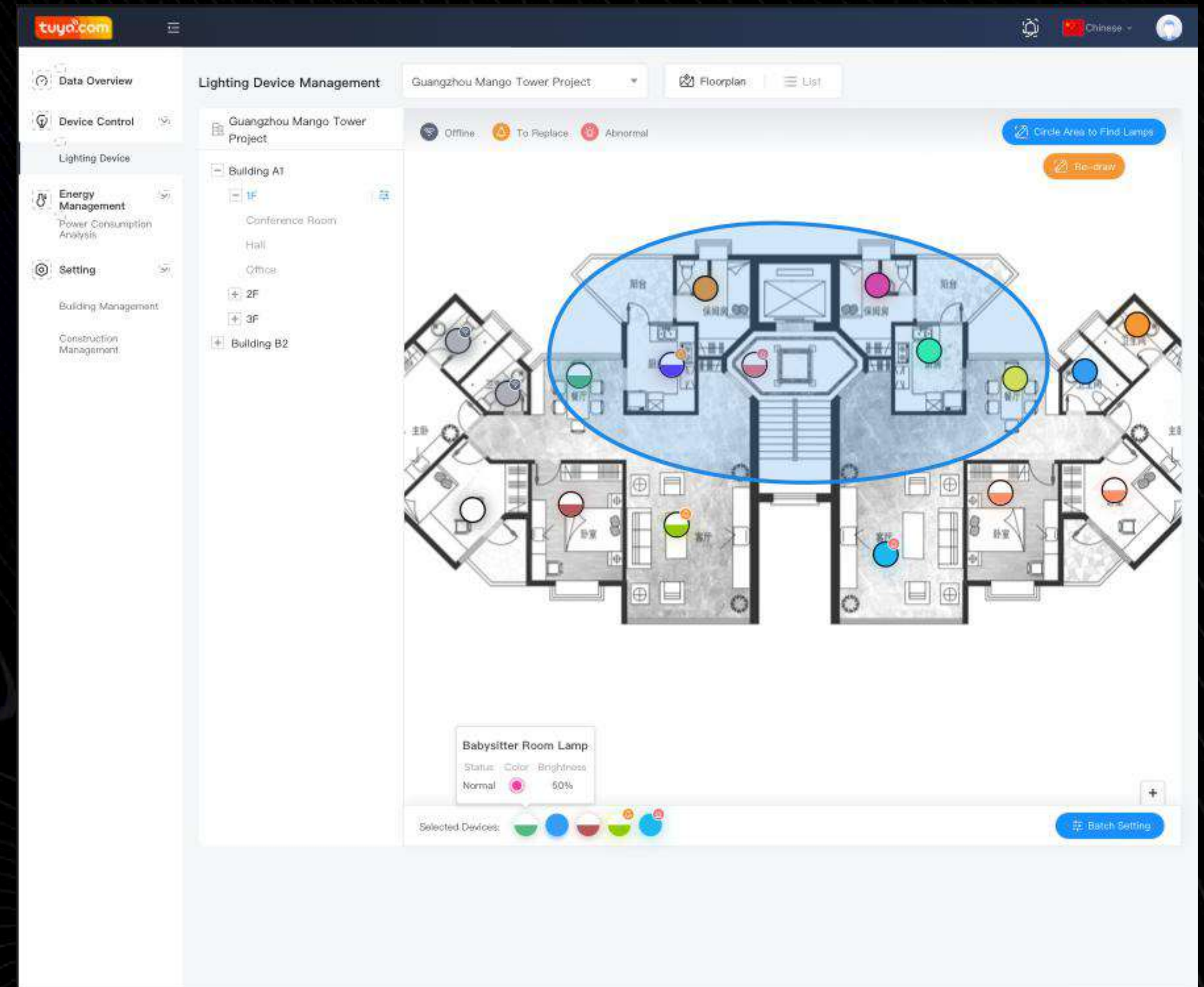


The screenshot displays the Tuya Pro SaaS Data Overview dashboard. At the top, there is a navigation bar with the Tuya logo and user information. The main content area features a summary of device status: Total 1,038, Normal 838, To Replace 100, and Abnormal 100. Below this, there is a table of projects with columns for Project Name, Time, Total, Normal, To Replace, Abnormal, and Energy Consumption. An 'Alarm Setting' dialog box is open in the foreground, showing options for Device Offline Alarm, Alarm When the Remaining Device Lifespan Is, Alarm When the Device Detects Data, and Use System Notification or SMS Push.

Project Name	Time	Total	Normal	To Replace	Abnormal	Energy Consumption
Guangzhou Mango Tower Project	8:00 AM UT	25	15	5	5	100.00 kWh
Hangzhou More Center Project	8:00 AM UT	25	15	5	5	100.00 kWh
Hangzhou Yuhang District Mixc Phase 3 Lighting Project	8:00 AM UT	25	15	15	15	100.00 kWh
Guangzhou Mango Tower Project	8:00 AM UT	25	15	15	15	100.00 kWh

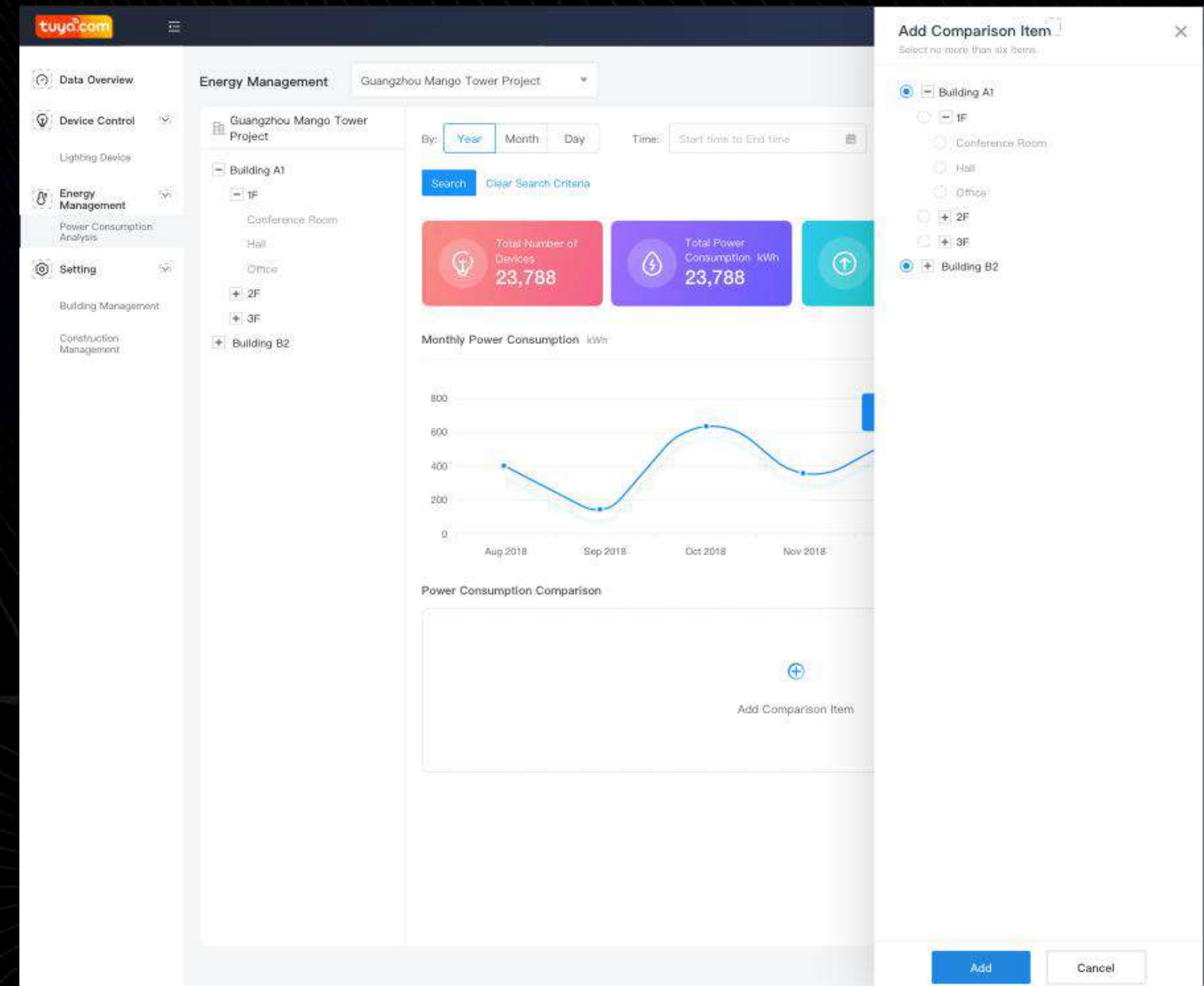
# Tuya Pro SaaS Visual Device Control

- Visual layout and map of all devices.
- Each dot represents one area or a group of fixtures.
- Quickly control all lighting fixtures by the building, floor, area or group.
- Easily locate “abnormal” devices through the map interface.
- Monitor and locate fixtures that need to be replaced.



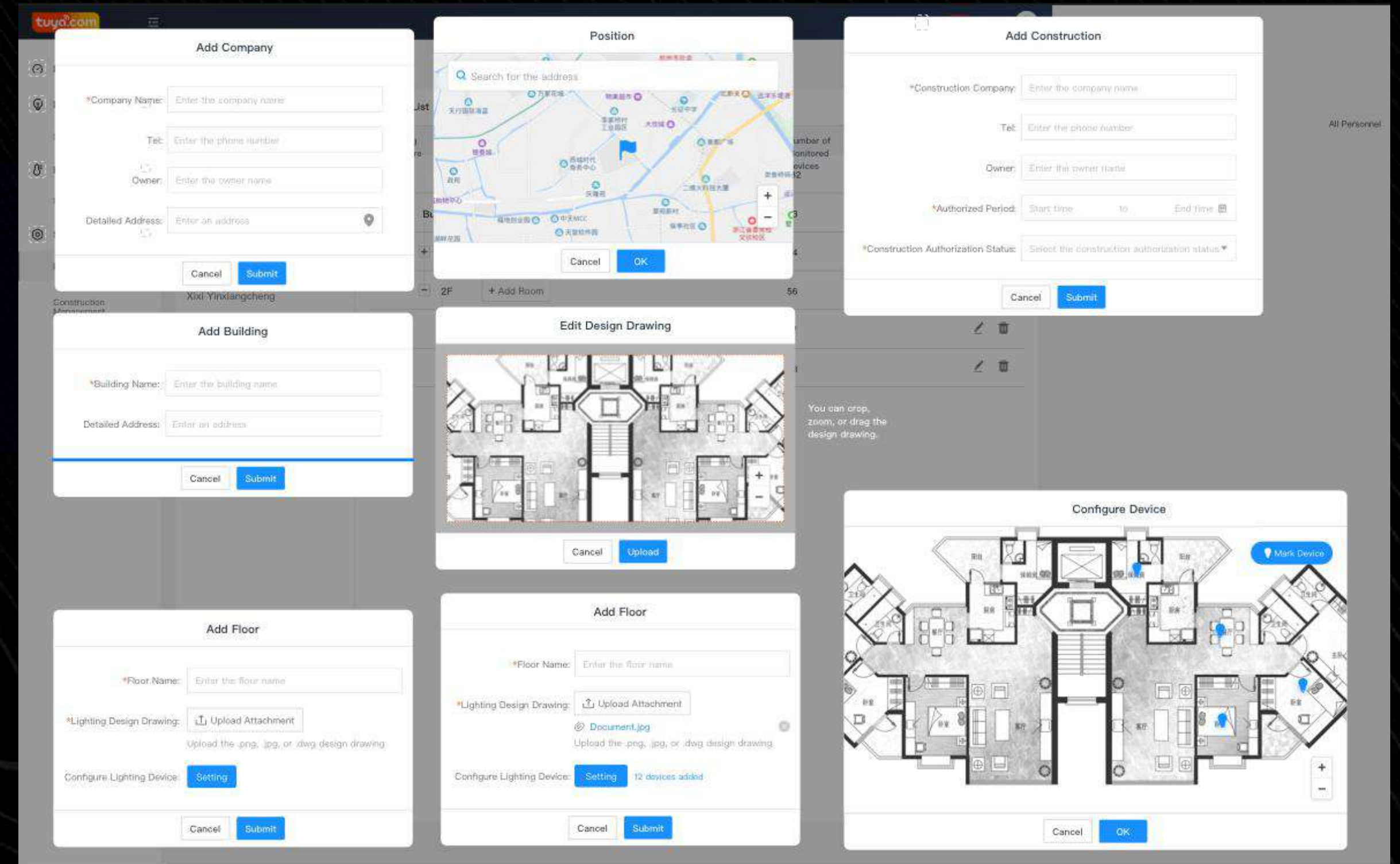
# Tuya Pro SaaS Energy management

- Quick energy consumption analysis by building, floor, area, group or individual device.
- Quick energy consumption analysis by day, month or year.
- Data visualization.
- Compare usage between groups to identify energy saving opportunities.



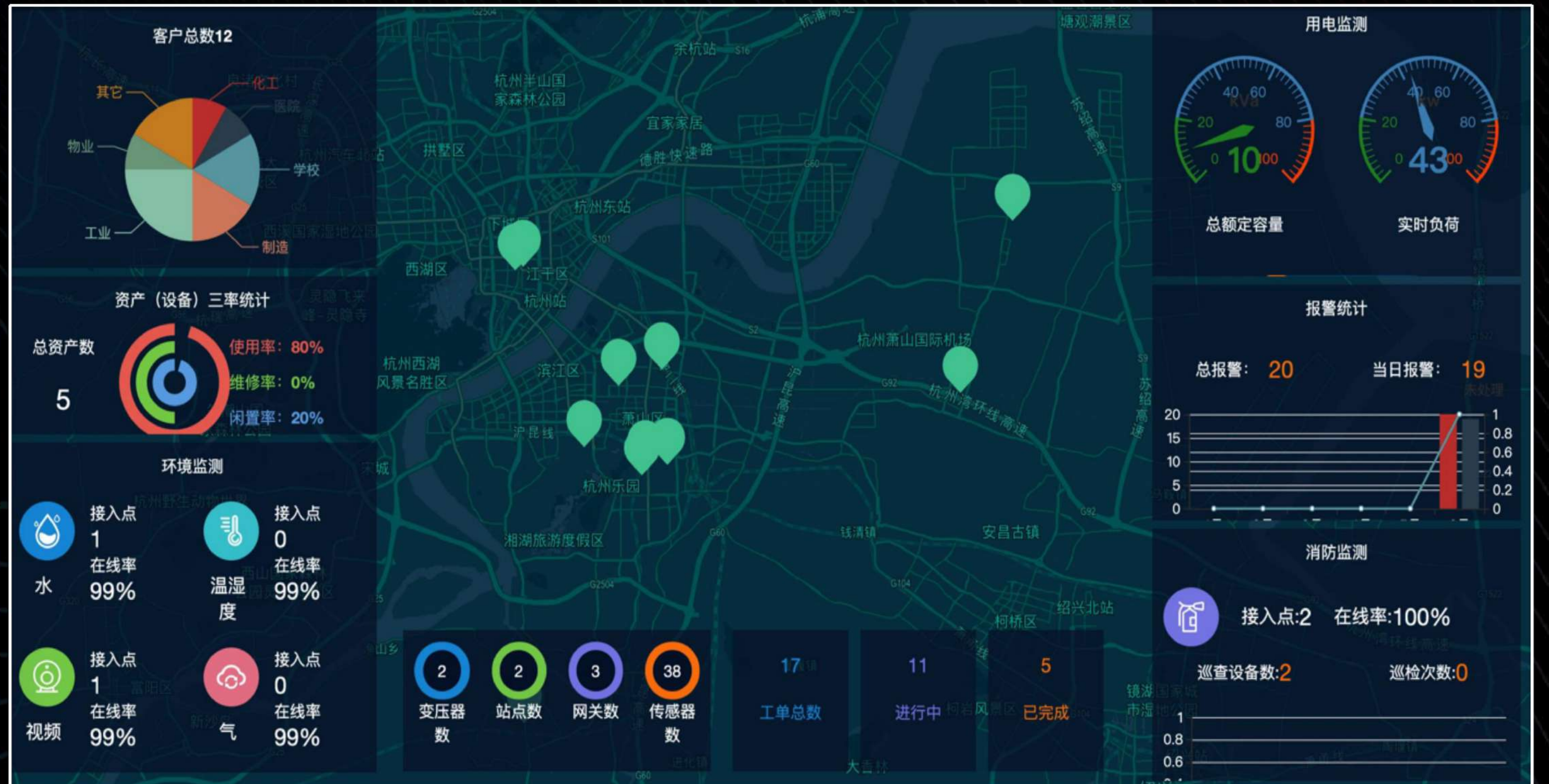
# Tuya Pro SaaS Construction Management

- Multi-layered creation and assignment of construction tasks.
- Manage project information for the whole company and individual contractors.
- Manage and monitor the schedule and status of projects.

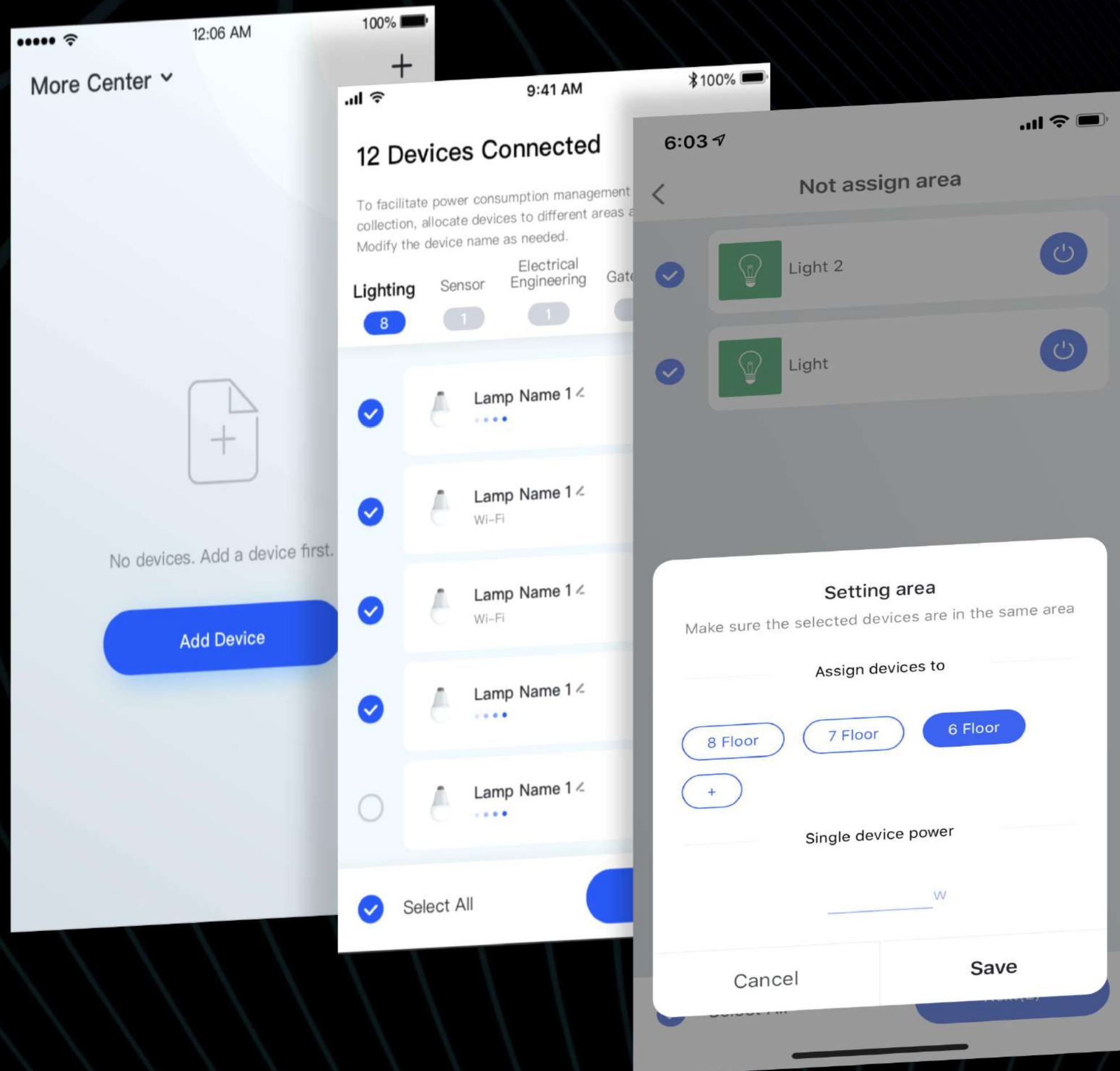


# Tuya Pro SaaS Future Functionality

- Create and control scenes through the SaaS platform to duplicate scene settings across buildings, floors, groups etc.
- Calculate and analyze the impact of different scenes on energy consumption and expected product lifetime.



# Tuya Pro App Adding Multiple Devices



- Automatically nearby devices in pairing mode and adds them.
- Quickly assign new devices to areas and groups.
- Multiple device types available, including lighting fixtures, wall switches, sensors, remote controllers etc.
- Create scenes to automatically control devices using sensors, switches and other criteria.
- Control other types of devices including security, HVAC, etc.
- Control multiple protocols in one app.

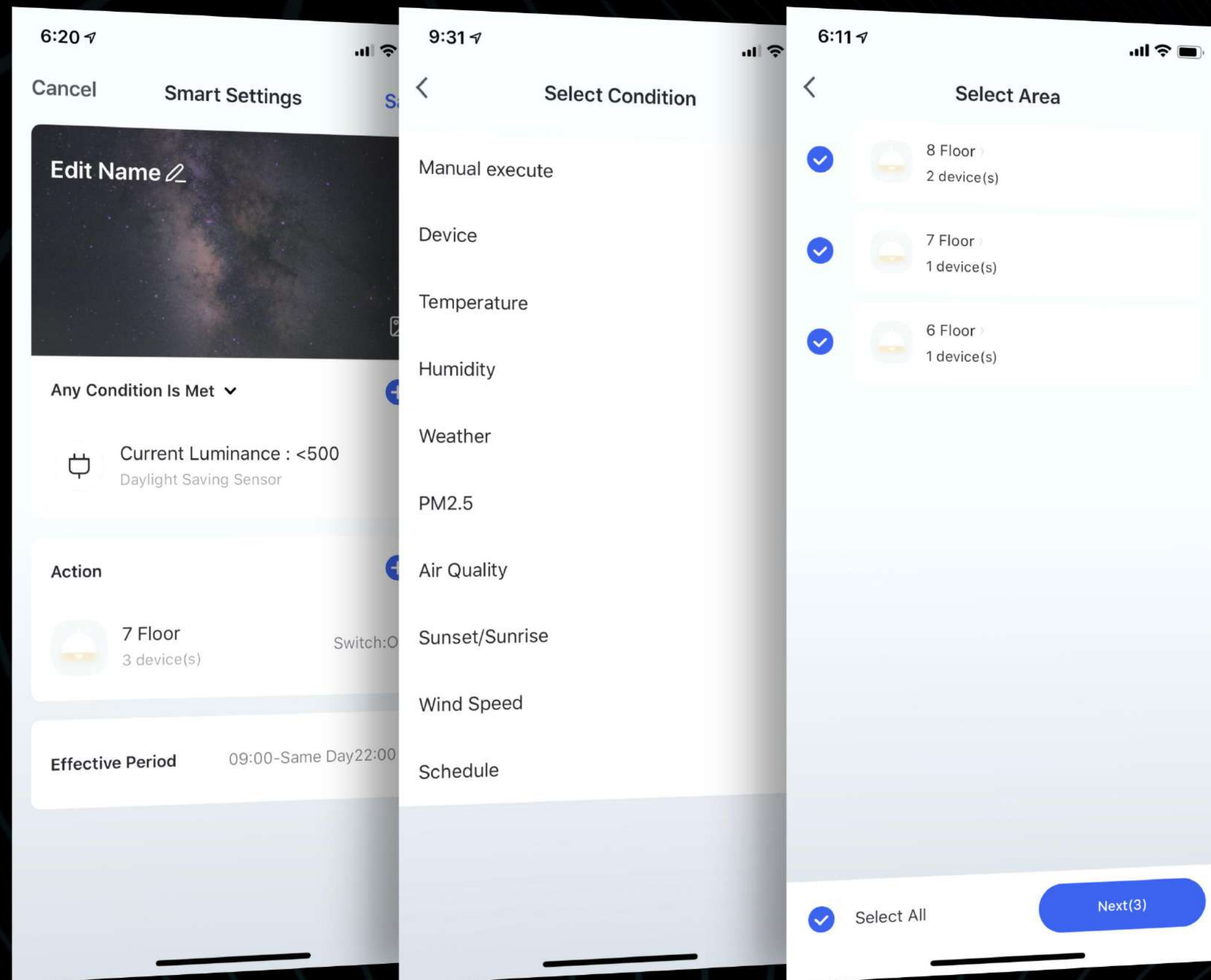
# Tuya Pro App Devices Management and Control



- Control all of the devices in a building, floor, group etc. at once.
- Shortcut buttons to change power, brightness, CCT and color.
- Classify the devices by categories.
- Calculation of energy usage by day, month and year based on entered wattage. Power meters available for the most accurate power consumption.
- Calculation of the total use time of each device and replacement reminders.
- Alarm for abnormal conditions.
- All group and device status displayed

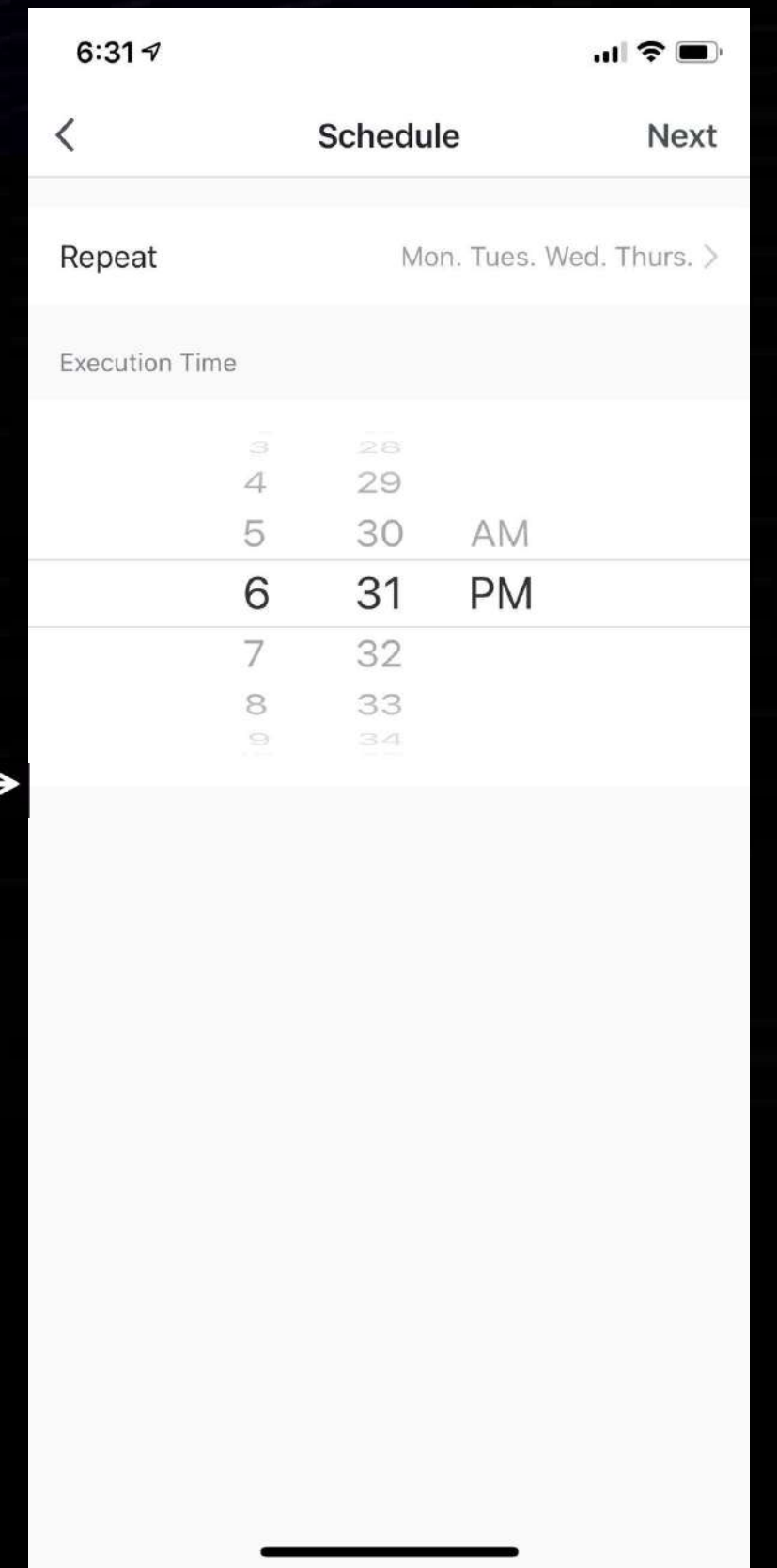
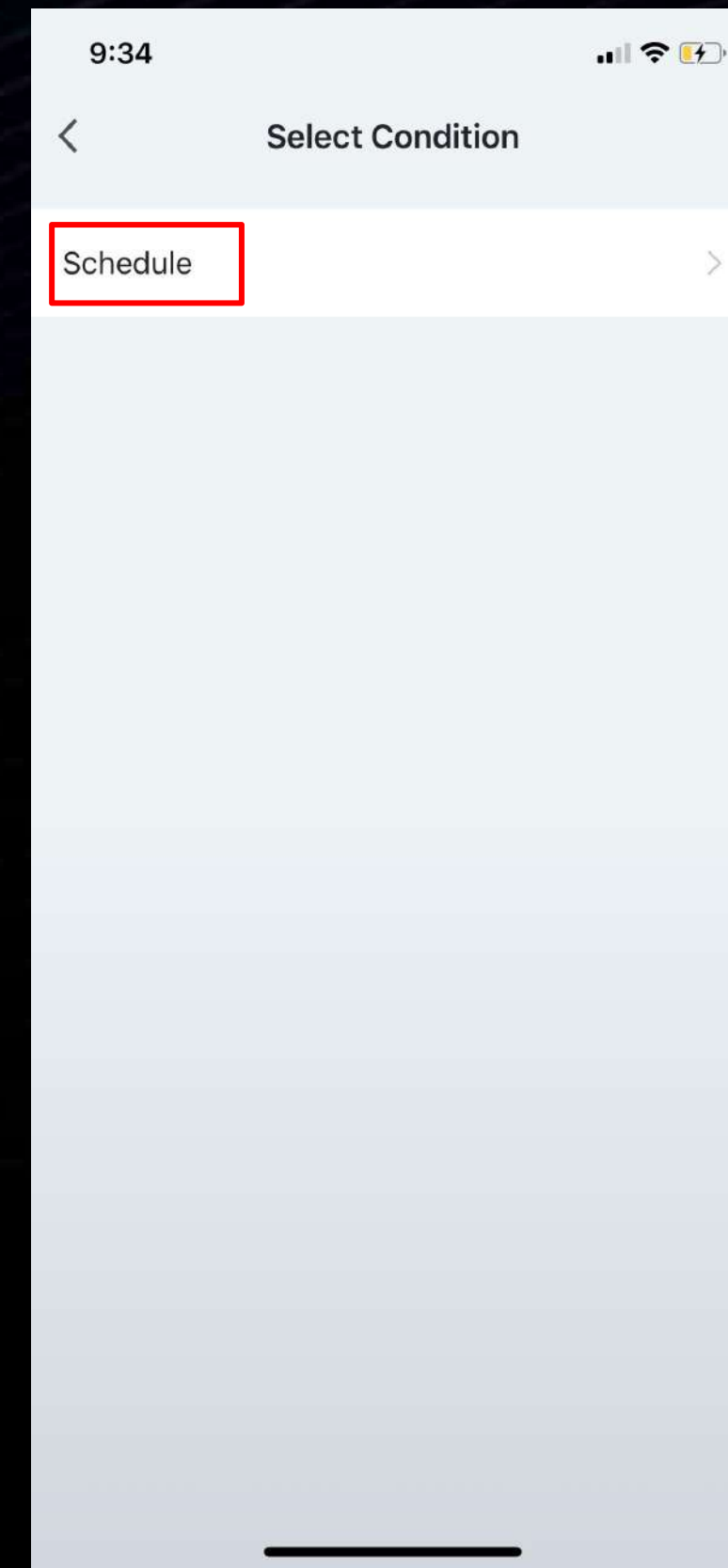
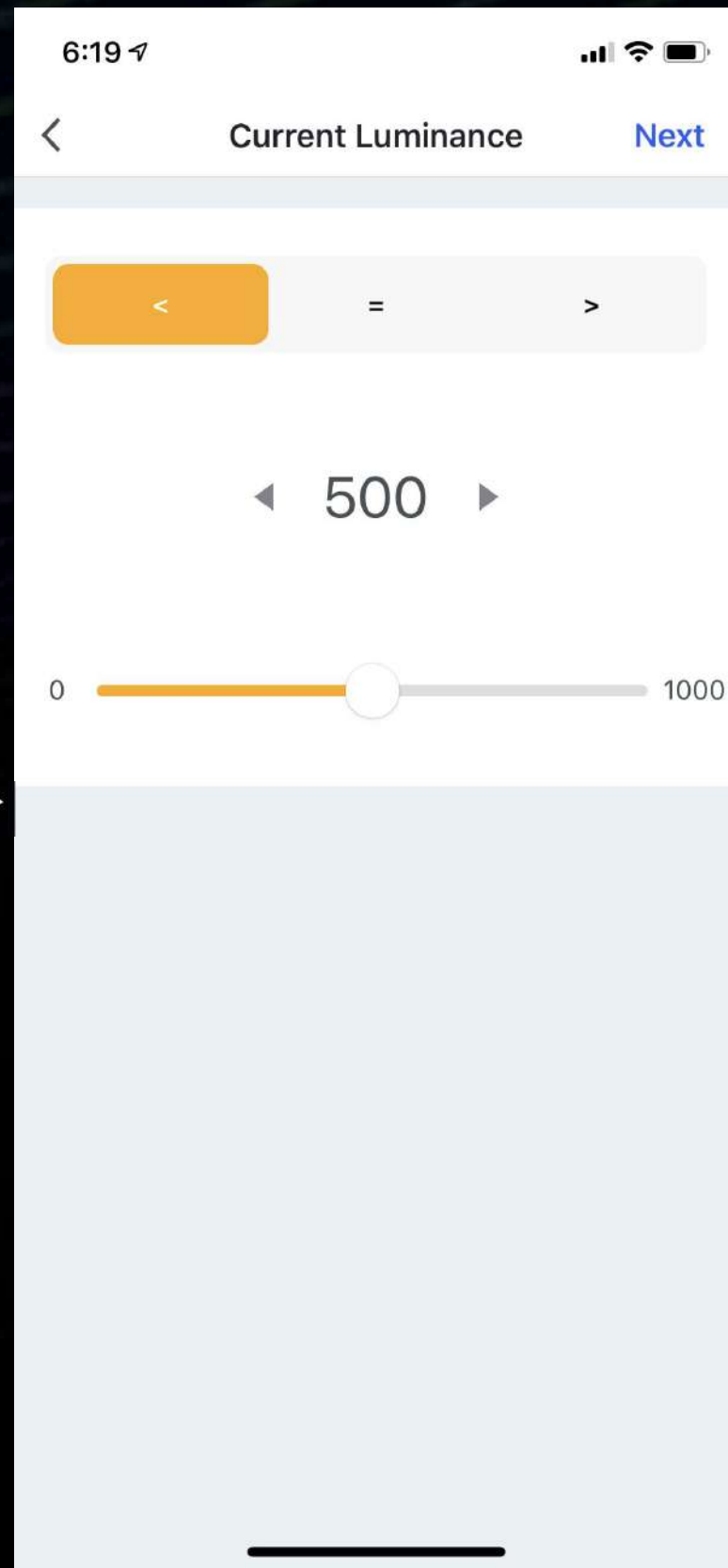
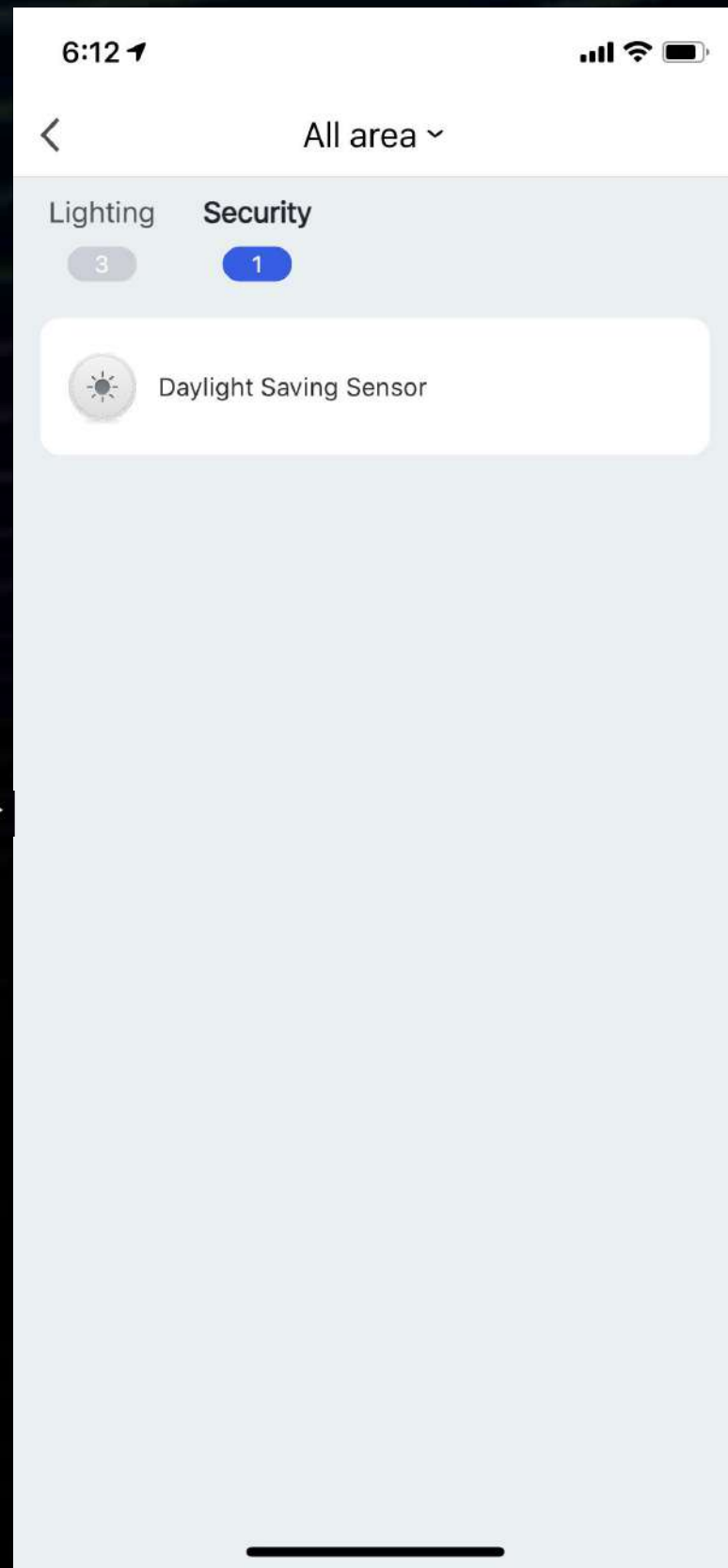
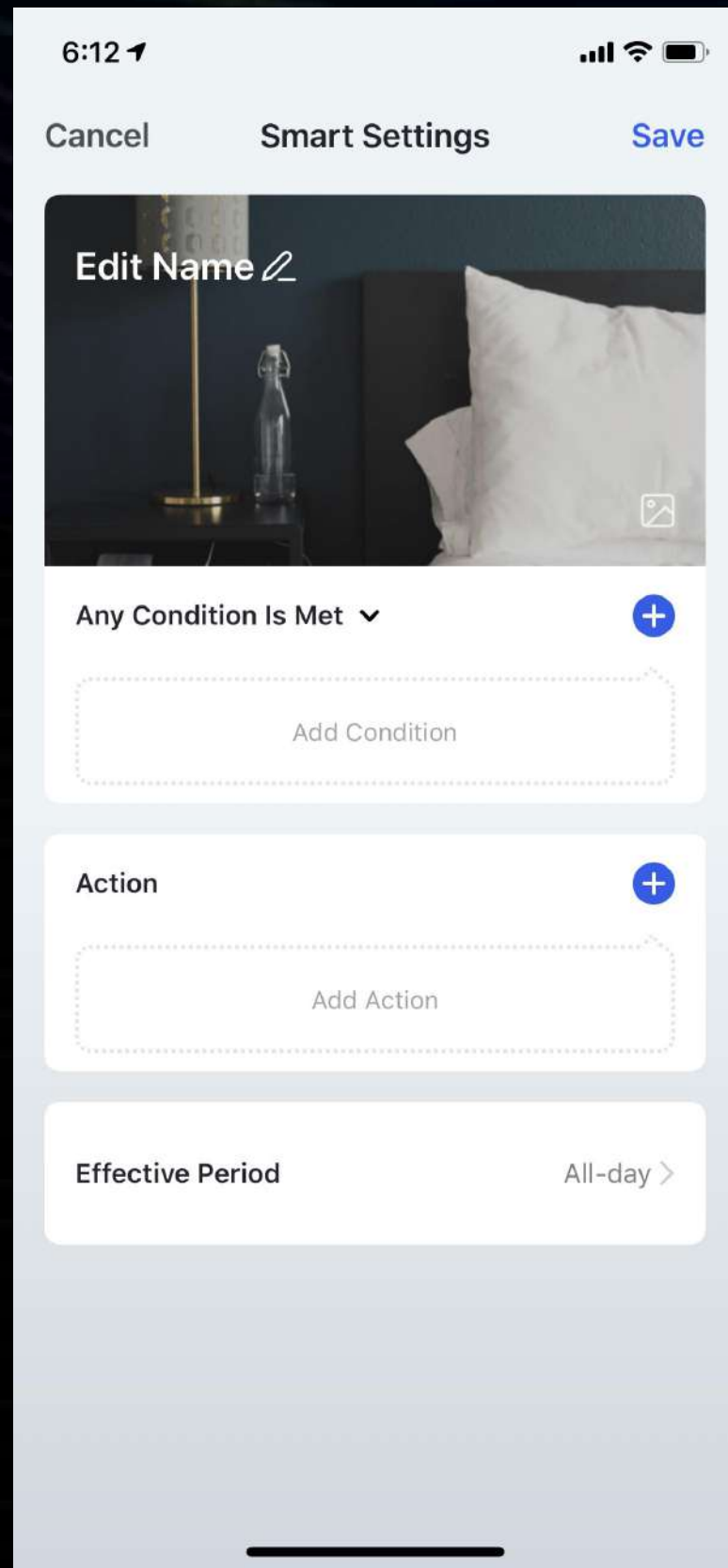


# Tuya Pro App Scene and Automation



- Create automations based on multiple trigger types including sensors, switches, schedules, and settings of other devices.
- Set the effective time of the scene.
- Receive a push notification when a scene is activated.
- Create multiple conditions to trigger scenes. Control multiple devices and areas at once.
- Can be used to implement energy-saving strategies and to calculate the results.
- Preset scenes and actions for circadian rhythms

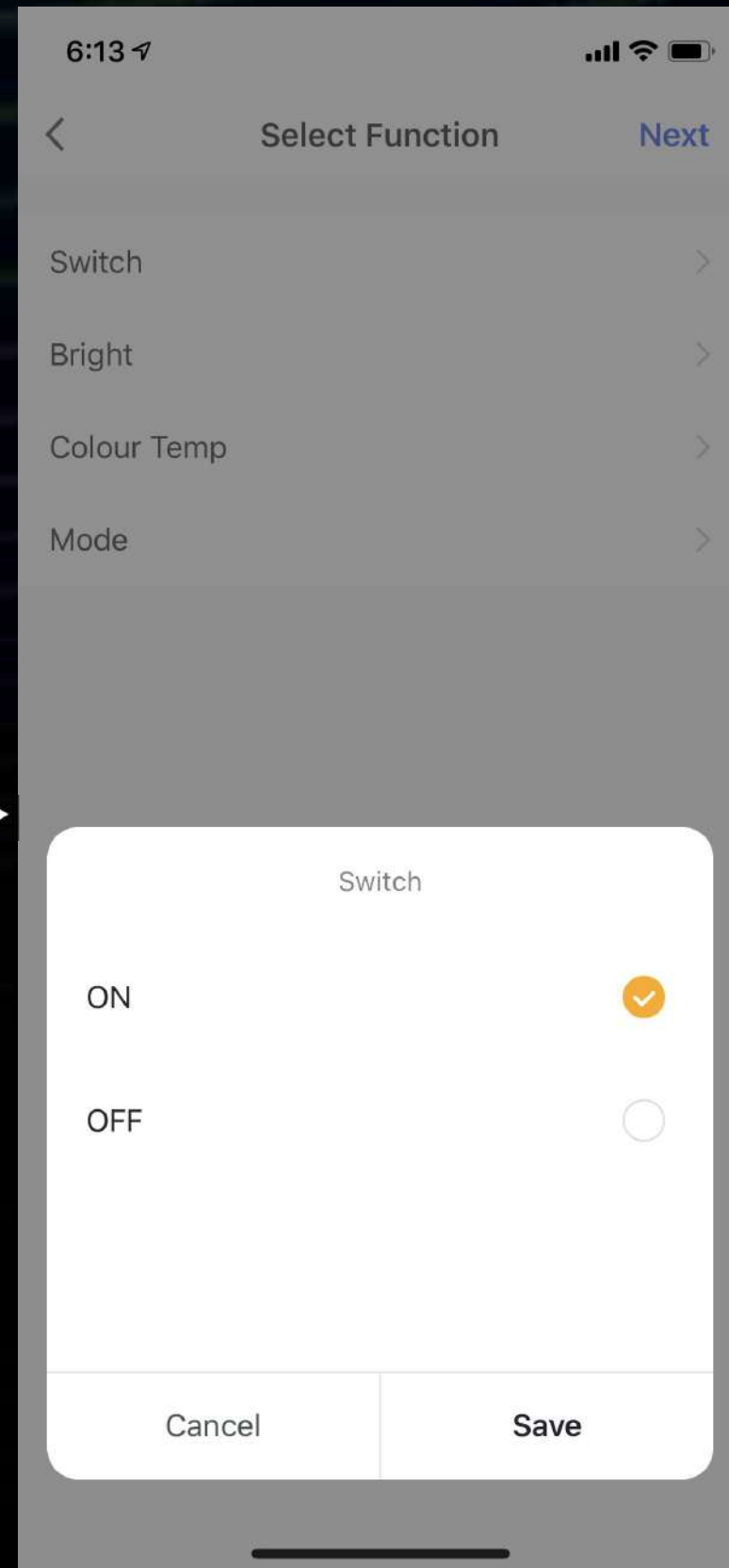
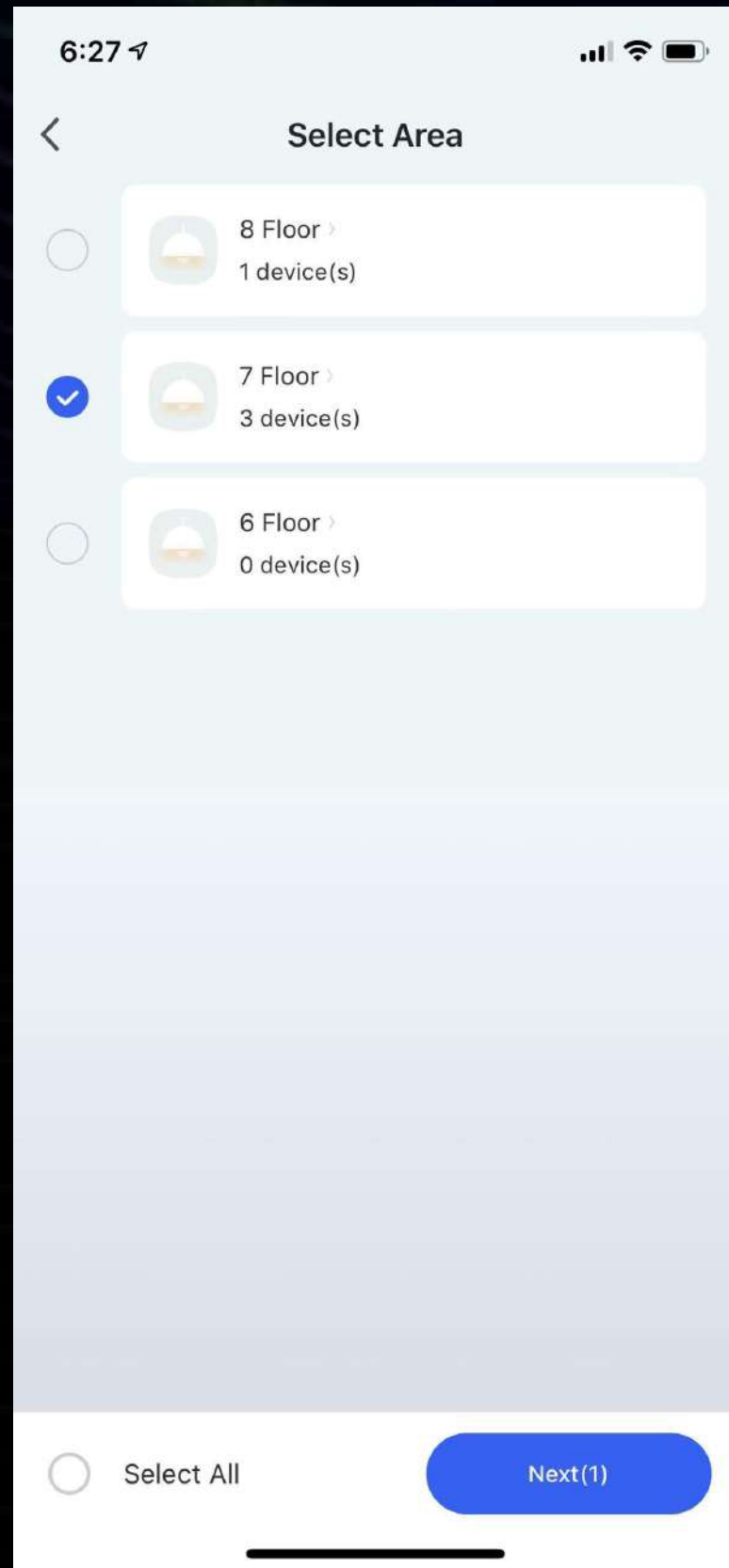
# Create a Scene Add Condition



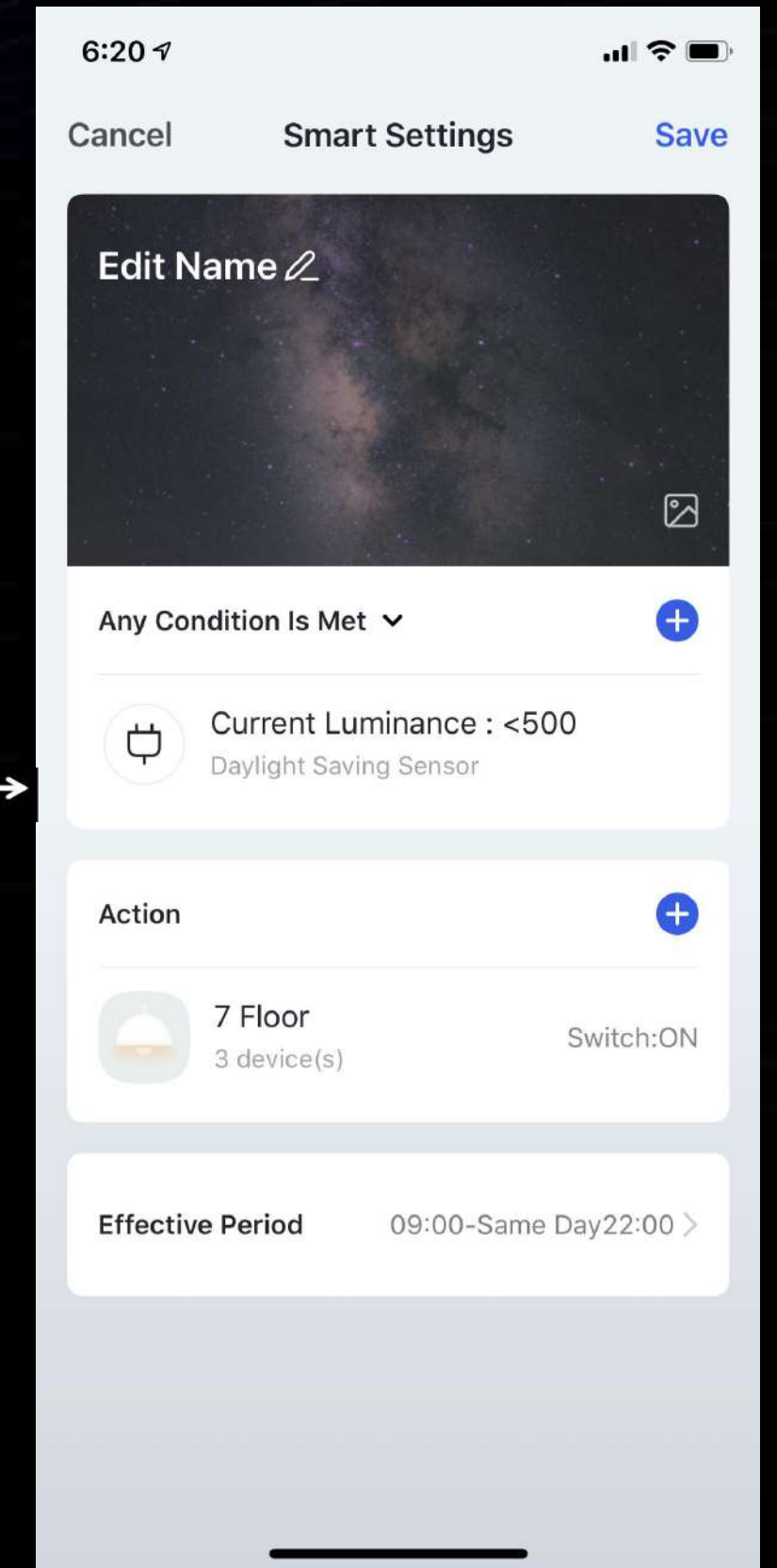
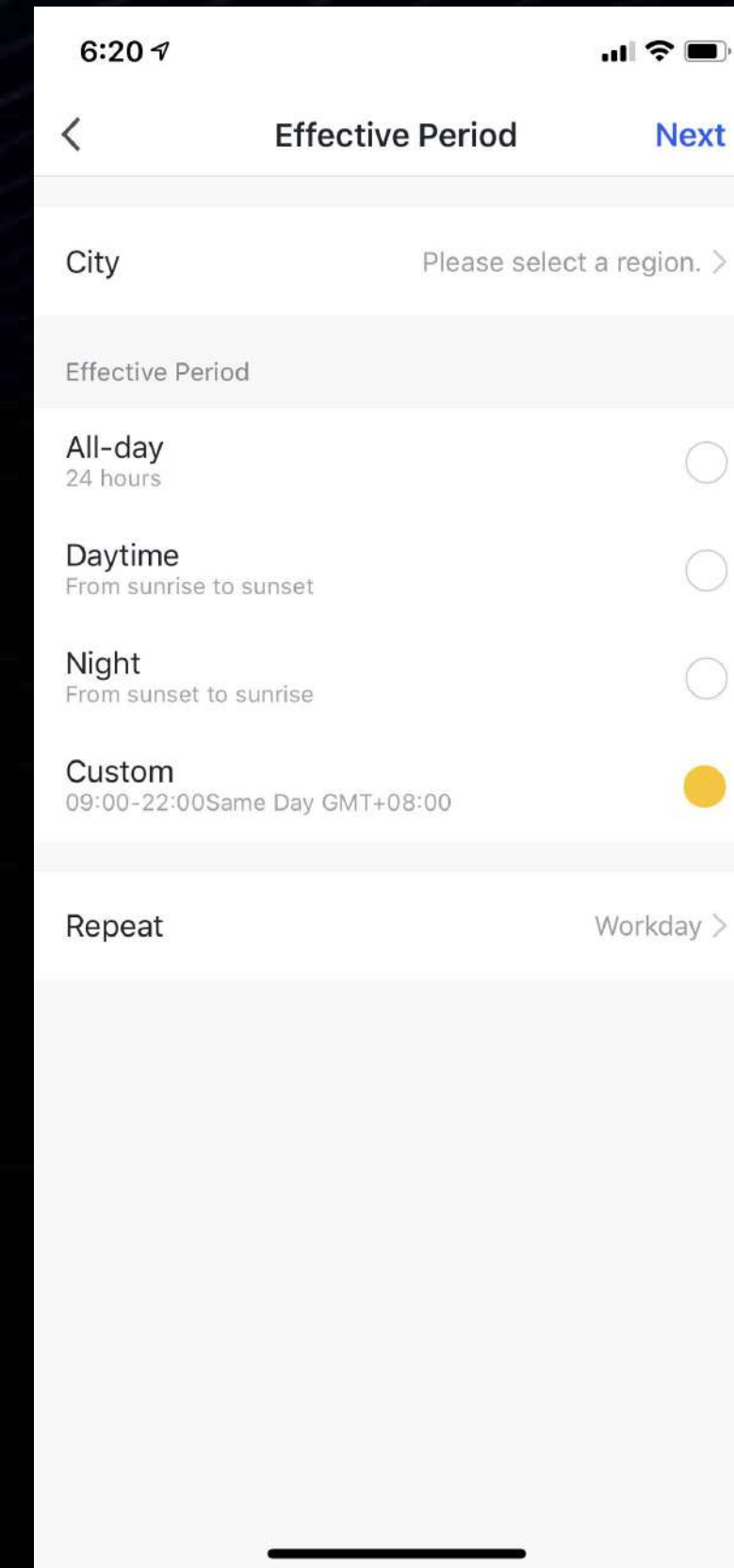
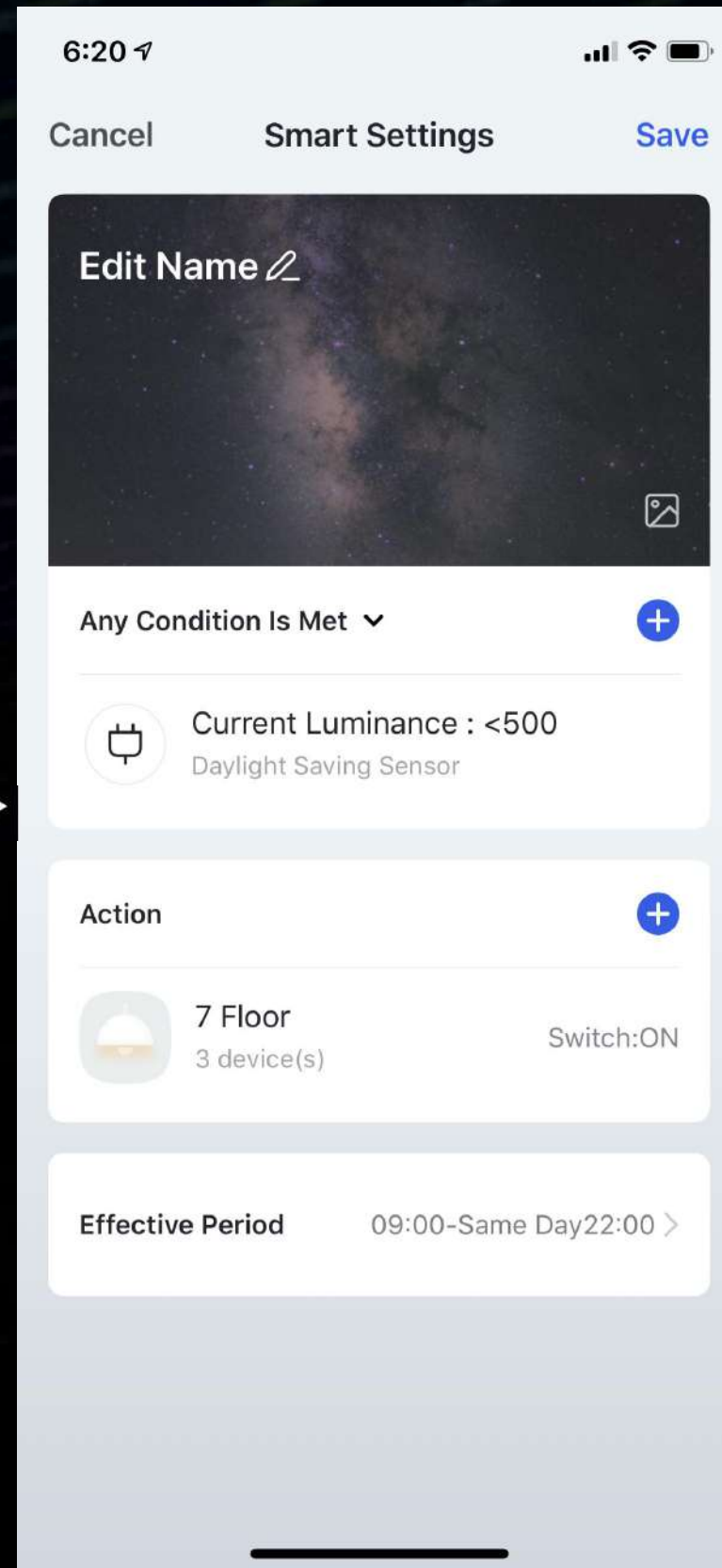
Sensor as the trigger

Schedule as the trigger

# Create a Scene Add Condition

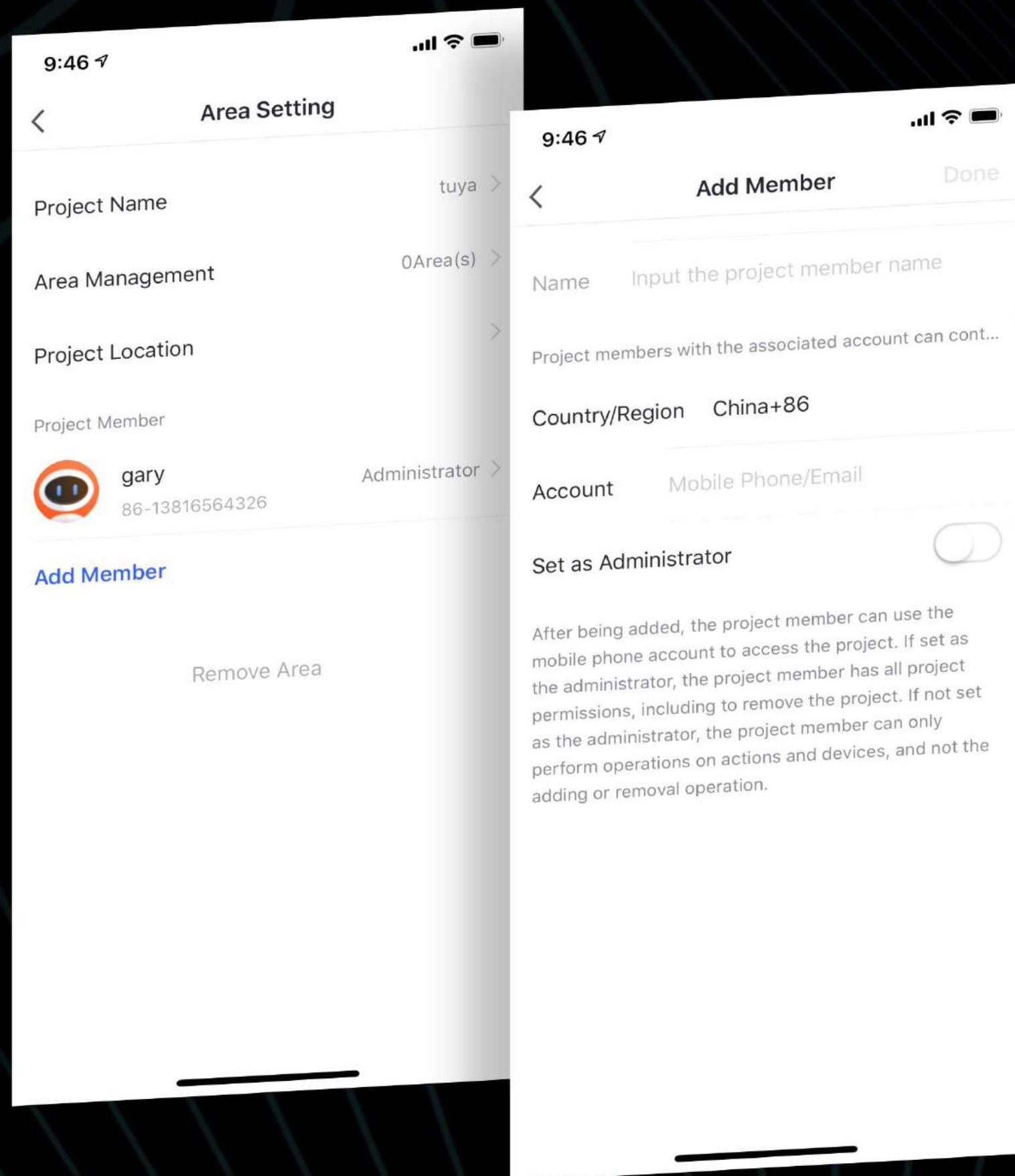


Add Action



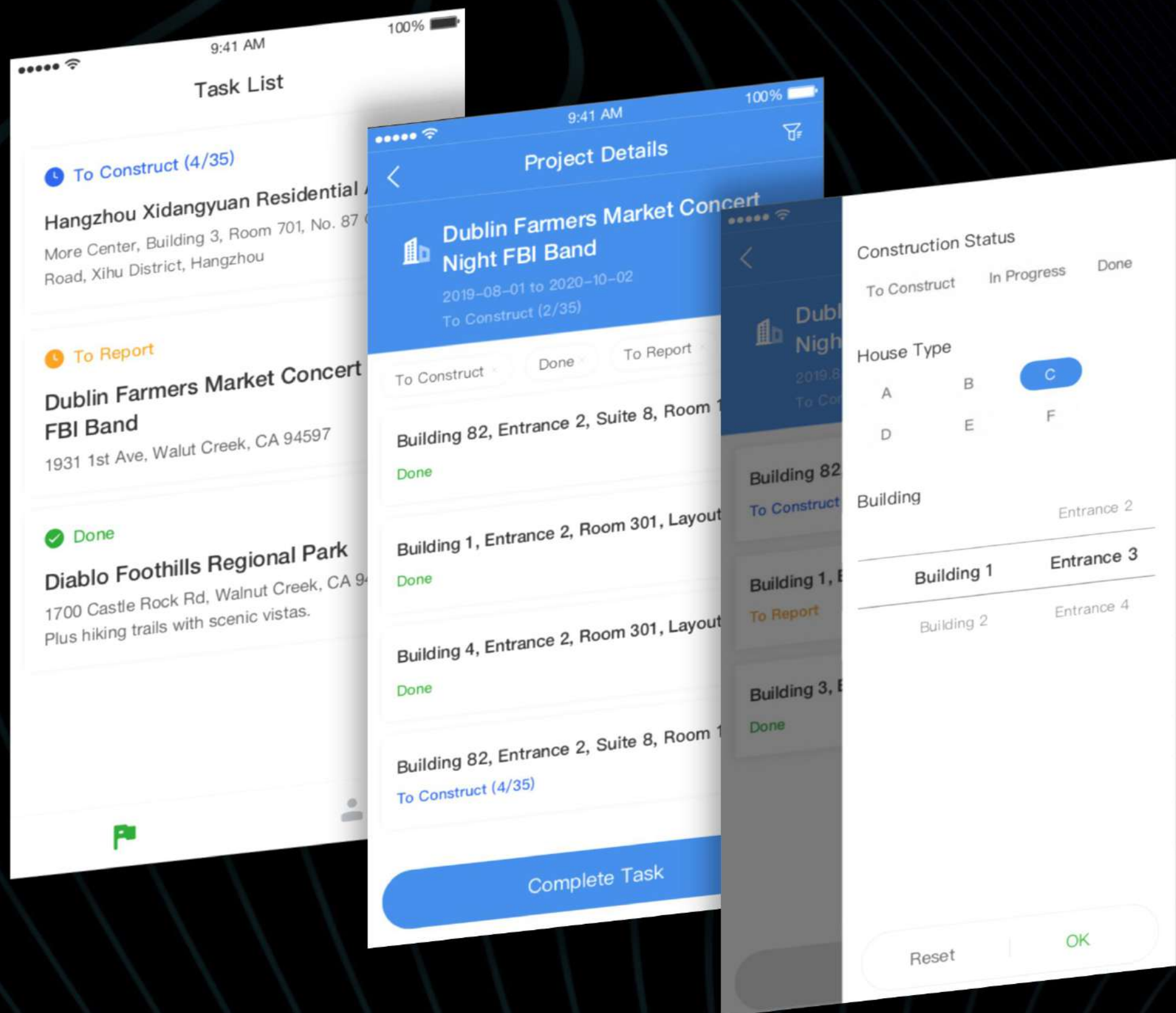
Set Effective Period

# Tuya Pro App Authorization Management



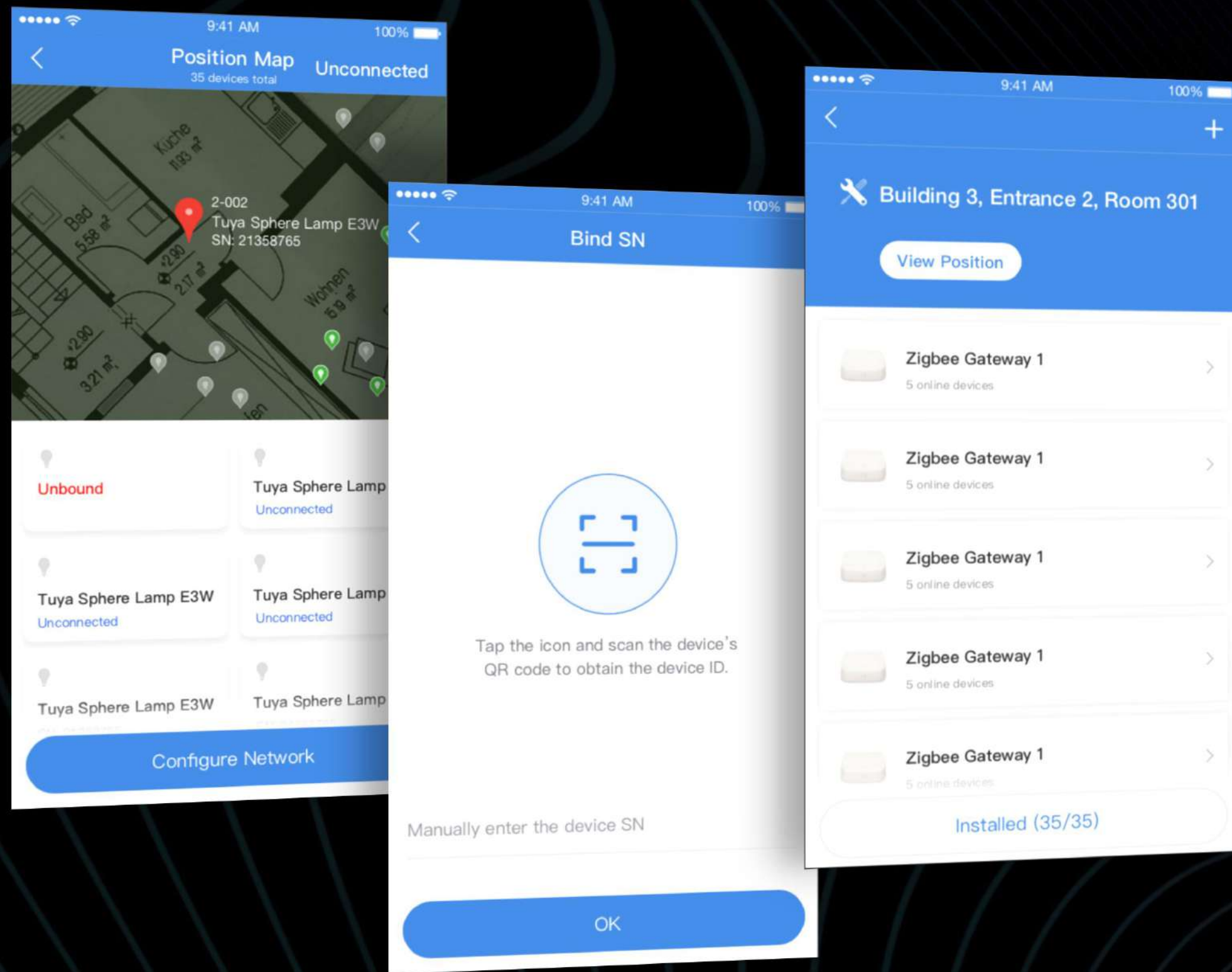
- Change the authority of the management team for each project
- Arrange the authority under device type, product function etc.

# Construction App Installer Authority Management



- Construction projects installer manager such as Authorized construction area, Authorized construction time.
- API connects to SaaS (Web End) and APP (User End)

# Construction App Smart Installation



- Clear installation map based on real building layout.
- Scan SN QR Code to identify device and map it's location

# THANKS

Contact us at [vip@tuya.com](mailto:vip@tuya.com)