Fill Level Monitoring

net bin

FarSite
COMMUNICATIONS

DRAFFIN **PPR**
PUBLIC PLACE BINS

Optimised bin monitoring and collection system for smarter cities

Fill: 64%
Temp: 13°C

Fill: 19%
Temp: 15°C

Fill: 23%
Temp: 15°C

Fill: 34%
Temp: 18°C

Fill: 85%
Temp: 20°C
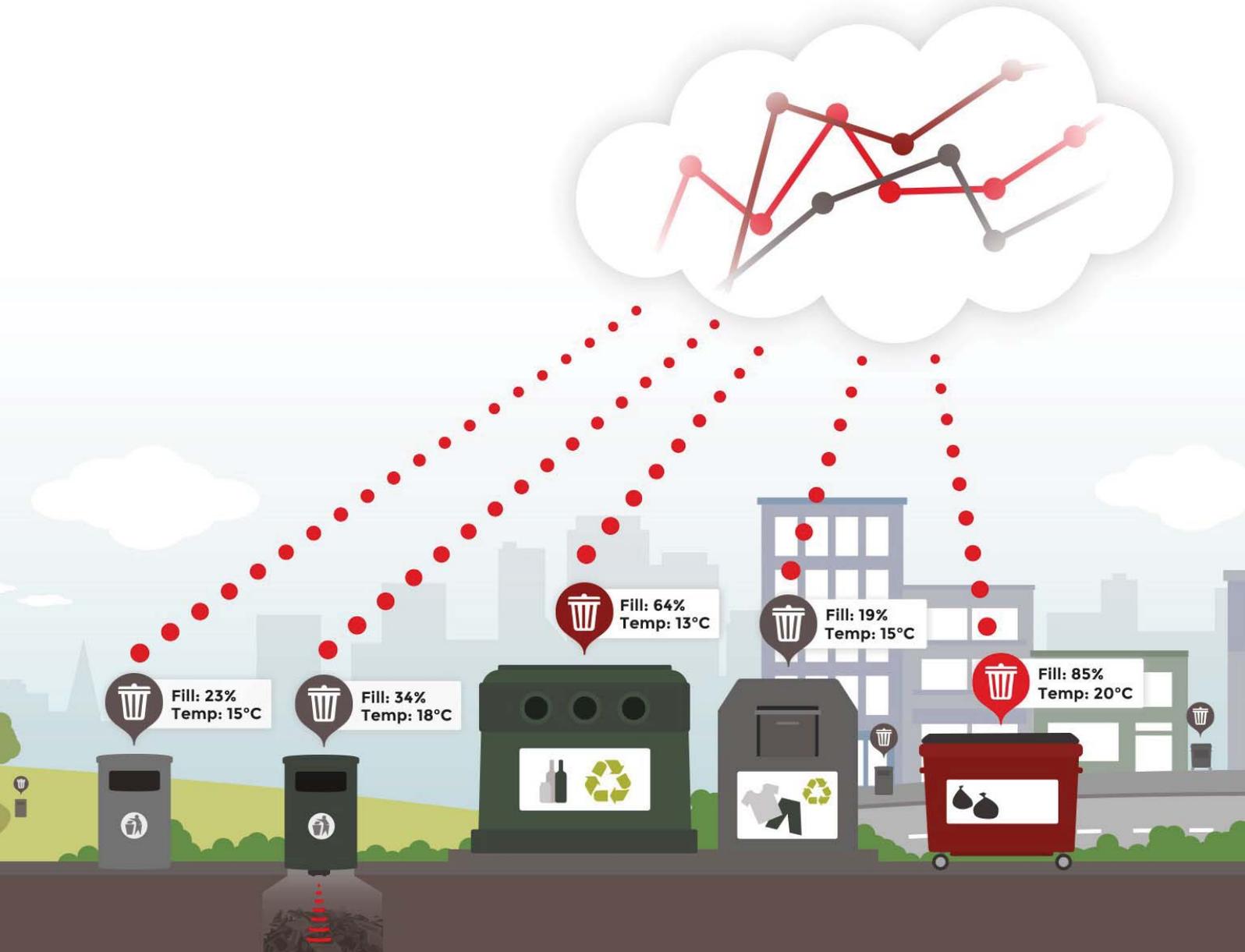
Reduce costs by 30-40%.
Automatic monitoring of bins provides timely details of when they are full,
permitting optimised route planning for collections - reducing collection times and
transportation costs - ensuring unsightly overflowing bins are a thing of the past.

www.draffin.com.au

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Benefits of using the netBin system

Reduce both cost and collection times with dynamic routing based on reported fill levels. Automatic monitoring of bins provides timely warnings when they are full, permitting intelligent route planning for collections ensuring no visit is wasted and unsightly overflowing bins are a thing of the past.

netBin is not just about waste collection - the nPod sensors can be retrofitted to almost any container to monitor its status, whether you need to know how full it is or sending an alert if its on fire, moved or tipped over.
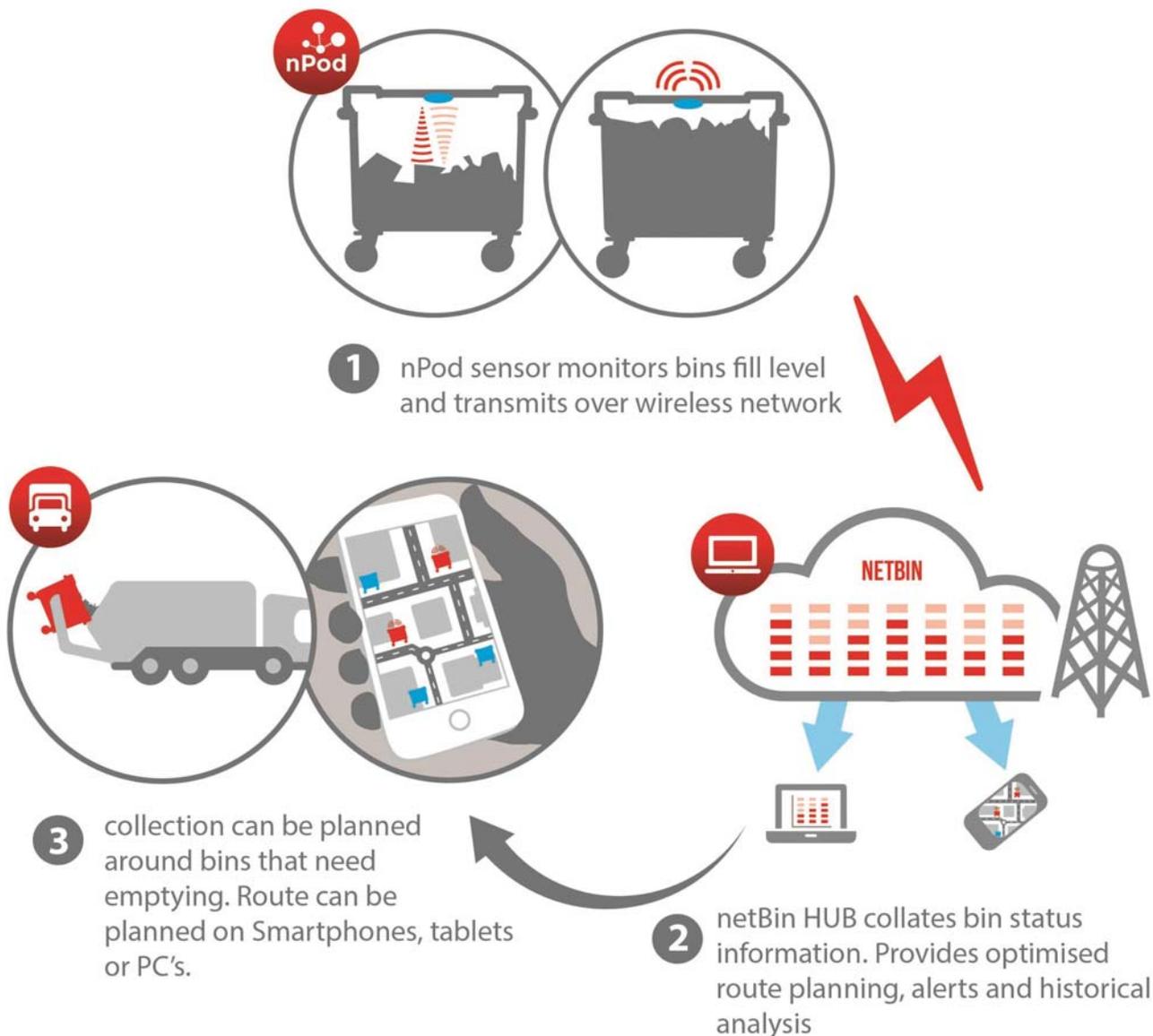
Reduce Costs

- Huge fuel savings
- Reduce fleet size
- Remove poorly utilised bins
- Reduced wear and servicing on collection vehicles
- Combat theft of bins and contents
- Fully utilise your workforce

Operate Efficiently

- Only empty bins that need emptying
- Optimised collection routes
- Avoid ugly overflowing bins
- Increase capacity in rapid fill areas
- Use netBin API to feed your existing software package with valuable fill level data

Monitor & Report

- Analyse existing collection routes against actual fill levels
- Monitor staff performance
- Gather evidence for new collection improvement schemes
- Identify trends in bin behaviour using Excel tool ANALYSER
- API Interface to big data

1 nPod sensor monitors bins fill level and transmits over wireless network

2 netBin HUB collates bin status information. Provides optimised route planning, alerts and historical analysis

3 collection can be planned around bins that need emptying. Route can be planned on Smartphones, tablets or PC's.

Applications

The netBin Management System is suitable for a very wide range of applications in which containers are used. Typical applications include:
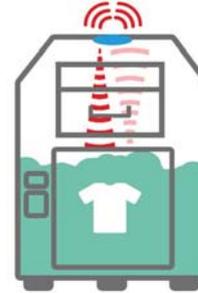
- Fill level measurement for litter bins including dual public recycle / waste bin
- Fill level detection for commercial waste bins, portable bins and clinical waste
- Fill level detection for Recycling Banks including Bottles, Textiles, Plastics, Cardboard and Metal
- Empty level detection for fuel containers, products or salt bins
- Full or empty level detection for other solids and liquid containers
- Fill level detection for compacter vessels, skips and large containers
- Fire, theft and vandalism identified using nPod's array of sensors

Commercial — Litter Bins — Textiles — Recycling

The netBin Suite

HUB

Our web based management platform is the centre for your decision making, route creation and analysis.

The HUB maintains comprehensive information on all containers being managed: their type, function, capacity, status, location and a history of events.

This information is stored in a database which is automatically updated as netBin sensors report changes to their status. The management application can generate alerts if, for example, a fire is detected or a bin overturned.

Bin monitoring frequency, temperature alarm thresholds, position update checks on mobile bins are all user configurable.
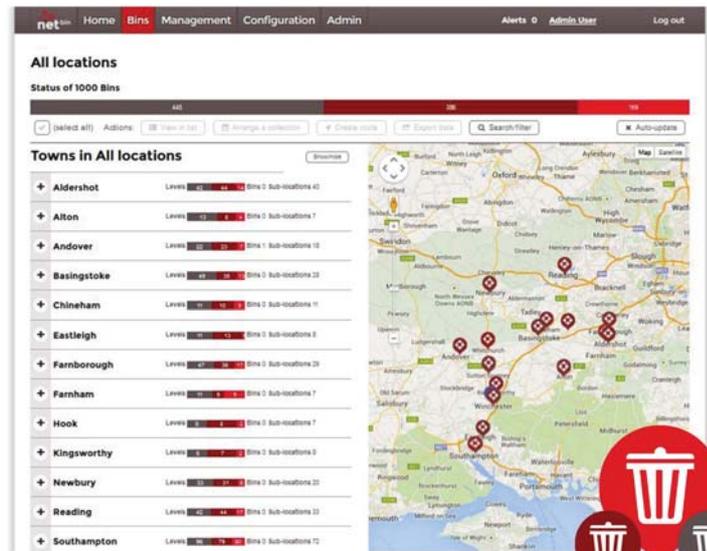

COLLECT

The COLLECT smartphone app is used by collections vehicle operatives to receive jobs assigned from netBin HUB. Information on suggested routes and estimated job duration are supplied. While completing jobs the driver has the ability to report back to headquarters.

If for any reason a bin has a problem netBin COLLECT can notify the netBin HUB supplying photographs and notes allowing the network manager to determine what action to take.

- Receives bin collection routes from the HUB
- Collects data from the field including photos and driver notes
- Reports unsuccessful empties
- Alert notifications
- Navigate between bins
- Very simple to use and optimised for minimal clicks
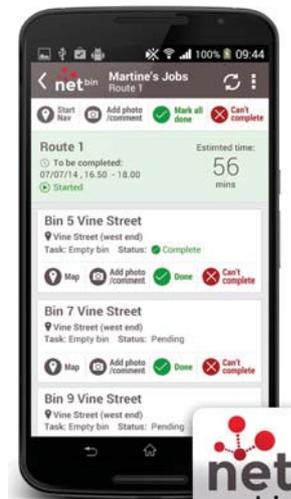
Fill Level Sensor

The innovative design features throughout the nPod enables class leading flexibility when mounting the device in all manner of enclosures and difficult to monitor places.

- 135° Variable angle dual ultrasonic sensors (patent applied)
- Rugged thick walled, high impact ABS Polycarbonate
- Reliable GPRS, 3G and communication
- Provides Fill Level, temperature, tilt and device status
- Intelligent fill level processing
- IP66 & IK10

Developed in conjunction with a world leader in bin design we know our rugged intelligent nPod will stand up to the harshest environments for years to come.

Tested in multiple bin types through a range of temperatures the nPod consistently performs with accuracy.

The satin black finish helps the nPod remain inconspicuous to bin users. High security button head bolts increase the units resistance against vandalism and impacts.
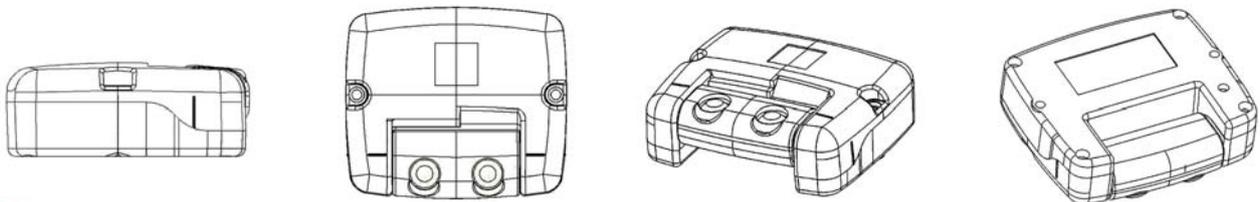
Automatic Collection Notifications

The nTag's clever design features enable automatic collection notifications to be reported in real-time to our bin management system when the cleaner empties the bins.

The discrete Bluetooth nTag fixes inside the bin and pairs with our INSPECTOR app reporting; distance from bin to cleaner, location and duration cleaner is at the bin for.

- Less hassle than RFID tagging
- Reports bins collections in real-time
- nTag automatically connects with the cleaners smart phone when they arrive at a bin
- netBin nTag app supplied for installation in an android based smart phone
- netBin HUB alerts Managers when bins have not been visited at the required frequency
- No training or maintenance of the nTag required
- Battery lifetime 5yrs.
- Low cost solution for deployment across entire bin networks.

INSPECTOR APP

ANALYSER

Our Excel based data analysis tool enables in-depth analysis of netBin's powerful historical raw data with a few clicks.

- Export all historical netBin data
- Analyse in Excel format
- Detect trends per location or waste stream
- Develop a strong understanding of bin behaviour

The netBin Analyser is a free add-on to the comprehensive netBin suite and greatly expands the analysis that can be performed on the data collected by the system.

The analyser processes a CSV (Comma Separated Value) file which includes bin Fill Level data and produces a Microsoft Excel Spreadsheet showing performance statistics over the period requested with easy user customisation of the results.

API

Integrates valuable netBin data into existing third party collection and bin management systems. Expensive and complex scheduling software doesn't need to be replaced, netBin API allows powerful bin data to be sent between software packages. Get in touch with our technical team to discuss your requirements in more detail.

SETUP

Commissioning your new netBin system is made fast and easy with the SETUP app. Each nPod's QR code is scanned before install updating the HUB with the new location and bin details.

Maintenance and Upgrades

A maintenance and support service is provided as part of adopting the netBin system. This includes updates to the netBin Suite, replacement of faulty hardware and technical support for the duration of the contract.

Getting Started

Just get in touch with our very experienced and friendly staff, they will check that netBin is a suitable solution for you and answer any questions you may have regarding the installation, operation, cost, timescales and maintenance of the netBin system.

After establishing outlines of the project we can arrange a live demo to illustrate some of netBin's best features currently in use in the field.

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Web: www.draffin.com.au

Book your free demo now

Notes: