

# Can cobotics save you time and money and make a real difference to your environment?



At Nviro, we are passionate about providing the best cleaning service we can and this means keeping on top of all the latest innovations – when they genuinely help our clients’ environment and can save them money. Over the past five years, we have conducted trials and implemented various automated tools on different contracts, each with its own level of success. But technology changes all the time and it can be hard to keep up with technological developments when you aren’t using them all the time.

So, we’ve used our 30 years of expertise from cleaning in many educational and local authority sites to create your handy guide to cobots and their functionality.

This year (2023), we’ve tried three new-to-the-market cobots that have benefits in different areas, and can help contribute to the clean, hygienic, and safe environment that we all want to provide to our building users.

The three cobots that we have tested recently are:



## Phantas

A medium-sized cobot designed to operate on carpets and hard floors, making it versatile for various settings.



## Pudu CC1

A medium-sized cobot that excels on carpeted and hard floor surfaces, offering flexibility in different environments.



## Ecobot 50

The largest of the three cobots we tested - ideal as a large space, hard floor surfaces cleaner.

## 1. Space and surface

Cleaning in large spaces is a common challenge our clients face, whether it’s a sports hall or a reception area. The choice between these cobots will depend on the amount of space you have to clean.

All three of these cobots can effectively clean a space like a sports halls, but the Phantas and Pudu CC1 may take slightly longer due to their smaller size. From our experience, the Phantas and Pudu CC1 cobots are generally more suitable for smaller open areas, while the Ecobot 50 shines as the room size increases.

However, if the area has carpet, Phantas or Pudu CC1 would be our choice.

## 2. Size and location

Corridors can be time-consuming to clean, and finding a solution that allows your cleaners to focus on other areas can significantly impact the overall appearance of your building.

Depending on the complexity of your corridors, you might want to look at the cobots where you effectively map the area and it cleans within an agreed parameter.

The Phantas and Pudu CC1 are ideal for vacuuming carpets in corridors, as they can be mapped and set off to work autonomously. These cobots also come equipped with side brushes to ensure no dust, dirt, or litter is left behind, reaching close to the edges.



On the other hand, the Ecobot 50 is an excellent choice for wider, long, hard floor-surfaced corridors, as it can efficiently scrub the surface without taking too long. However, we found a downside to be that it lacks side brushes to reach the edges for additional cleaning meaning your cleaning team might end up going over the area again to make sure the edges are spotless too!

## 3. Environmental benefits

We understand that the environmental impact is really important to our clients. So we also considered the carbon footprint of each cobot – important, if you are using them regularly.

The Pudu CC1 has the longest running time of eight hours, minimising energy usage by reducing the frequency of cobot charging. If water usage is a concern, the Ecobot 50 features a substantial 24-litre water tank and even recycles water, reducing the need for frequent refilling and emptying. This makes it an excellent choice as a scrubber dryer.

Choosing the right cobot depends on factors such as:

1. the size of your space (large open areas or multiple small rooms),
2. your primary floor type (carpet or hard floor),
3. the frequency of cobot usage.



## The Nviro recommendation

If you need a versatile cobot that can work on both carpet and hard floors in multiple areas, the Phantas or Pudu CC1 would be ideal. However, if your focus is mainly on hard floor surfaces and you require a slightly deeper clean, the Ecobot 50 is your best option.

## Product information

To help you fully understand the capabilities of each machine, we have provided a checklist on the next page. It highlights all the pros and cons, enabling you to make an informed decision that aligns with your goals of creating a clean, hygienic, and safe environment while optimising cost savings.

## Cobot comparison

	Phantas	Pudu CCI	Ecobot 50
Use on carpet	✓	✓	✗
Use on hard floor	✓	✓	✓
Sports hall	✓	✓	✓
Larger areas (receptions)	✓	✓	✓
Classrooms	✗	✗	✗
Corridors	✓	✓	✓
Sweeps close to edges	✓	✓	✗
Easily transported between buildings	✓	✓	✗
Vacuuming	✓	✓	✗
Sweeping	✓	✓	✗
Scrubbing	✓	✓	✓
Dust mopping	✓	✓	✗
Charge time	2.5 hours	3 hours	2 hours
Run time	5 hours	8 hours	3 hours
Water tank size	12.5 litres	15 litres	24 litres
Environmental benefits	Quick charge time – less energy used to charge	Long run time – less energy used charging	Reuses water Quick charge time

## Can we help you?

If you want to learn more about cobotics and how Nviro can keep your building clean, hygienic and safe, you can read our blog about how cobotics can give your building a boost.

**Link:** <https://nviro.co.uk/2022/11/01/how-cobotics-give-cleaning-teams-a-boost-in-your-school/>

