

Serverless & PHP

Where did the server go?

Matthieu Napoli

github.com/mnapoli

Serverless

Resource

Service

Storage as a Service

Database as a Service

Cache as a Service

Auth as a Service

Search as a Service

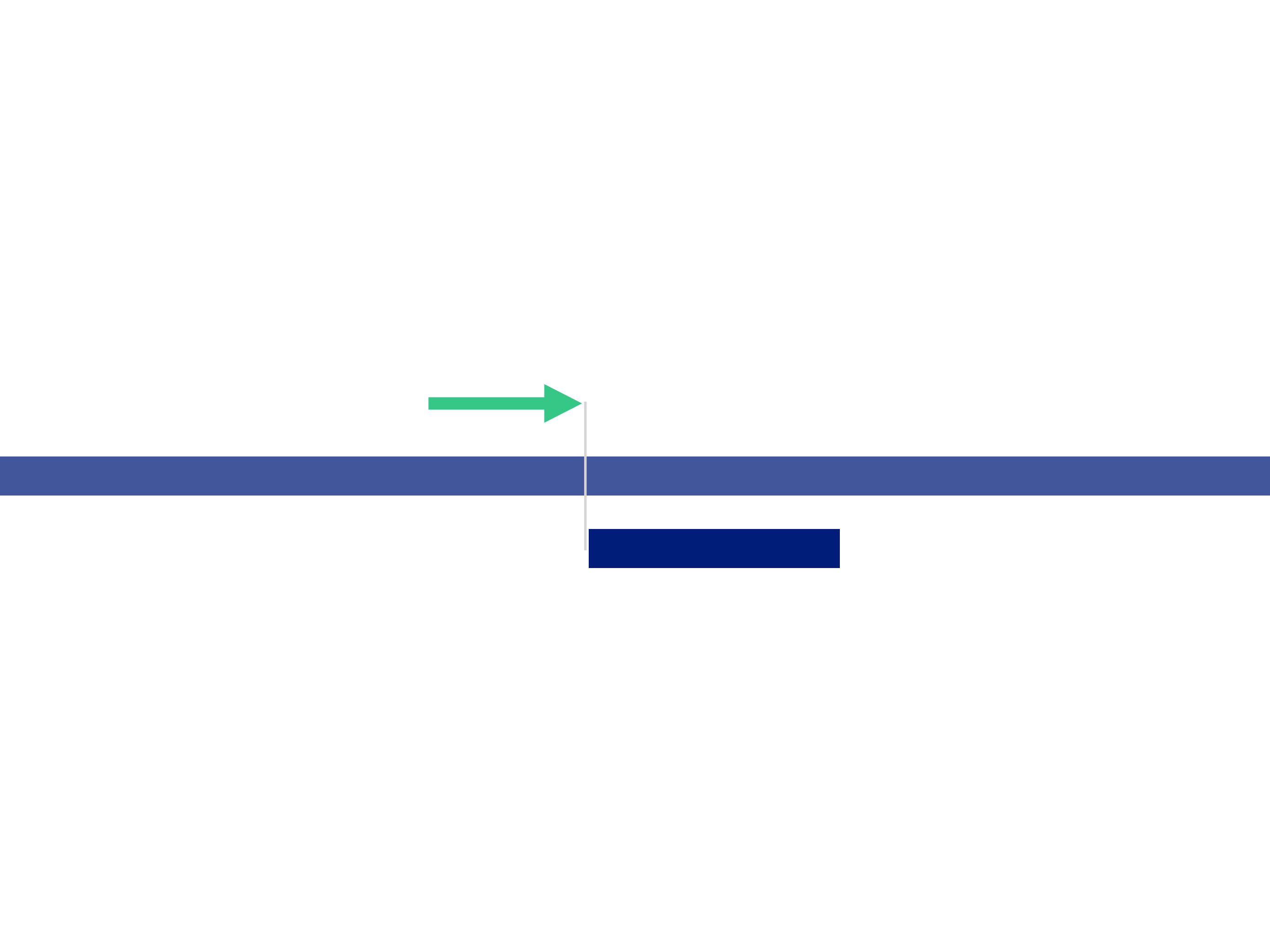
Operations

Scalability

Costs

Function as a Service







Events

Stateless

Operations

Function code [Info](#)

Code entry type

Upload a .ZIP file



Runtime

Node.js 6.10



Handler [Info](#)

handler.handle

Function package*



Upload

For files larger than 10 MB, consider uploading via S3.

Python

```
def handler(event, context):  
    return 'hello ' + event['name']
```

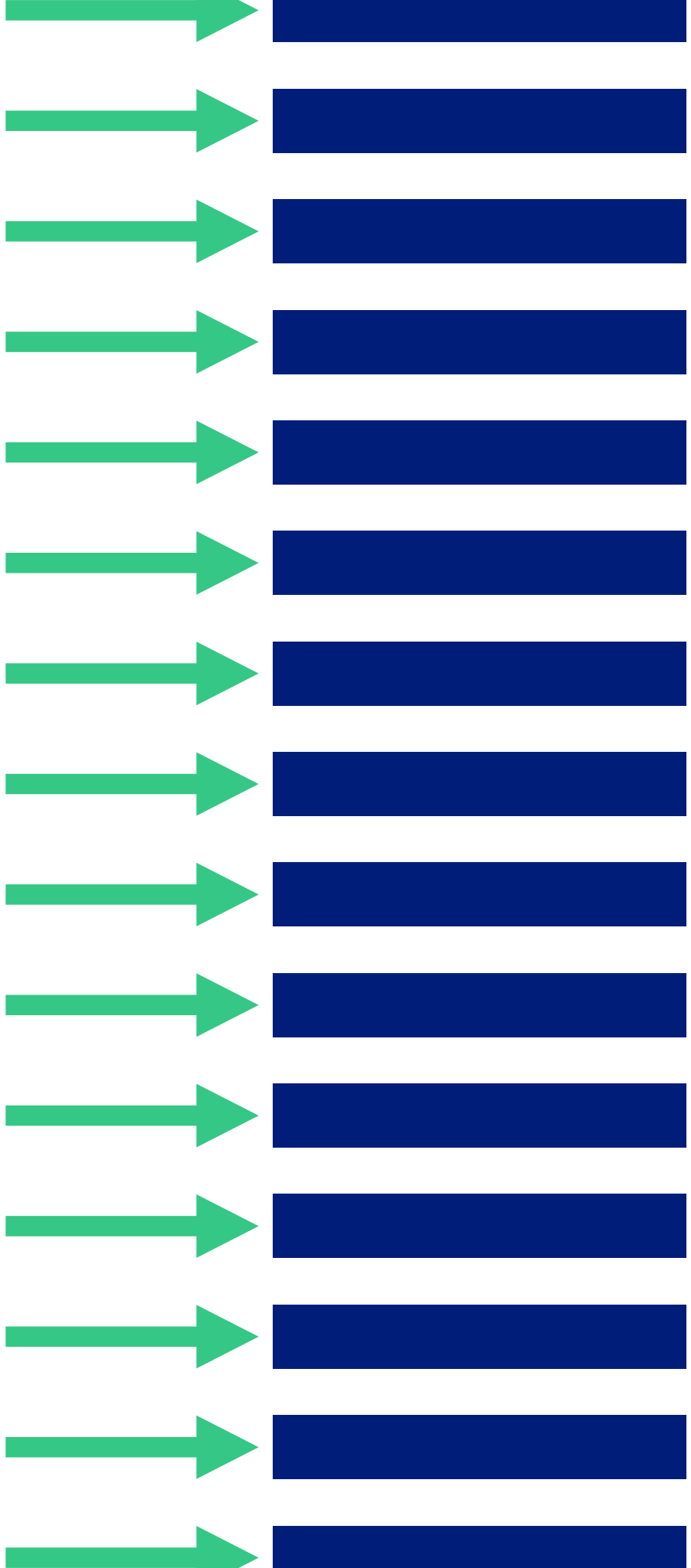
```
exports.handler = function (event, context, callback) {  
    let result = 'hello ' + event.name;  
  
    callback(null, result);  
};
```

JavaScript

Operations

Scalability

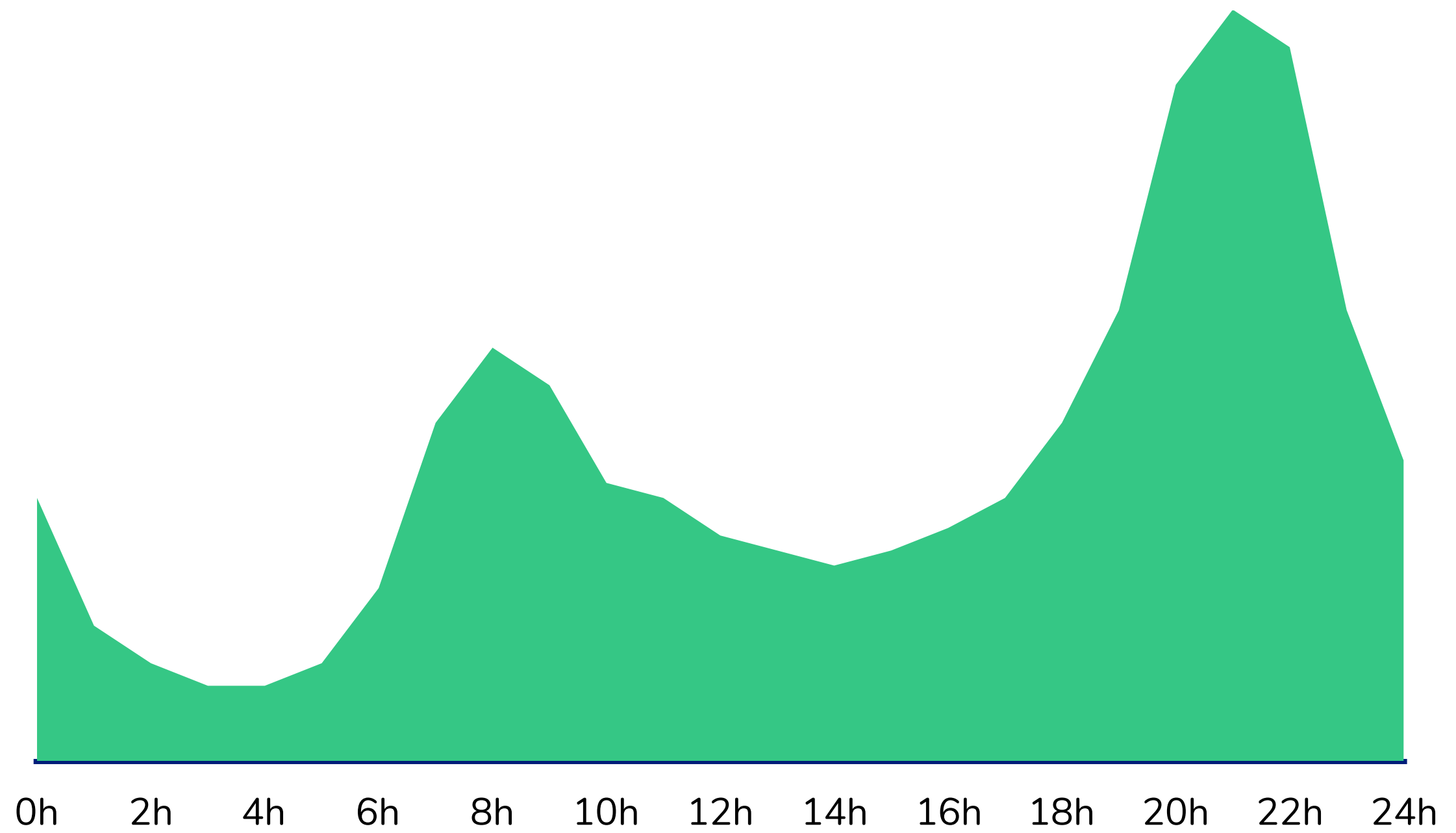


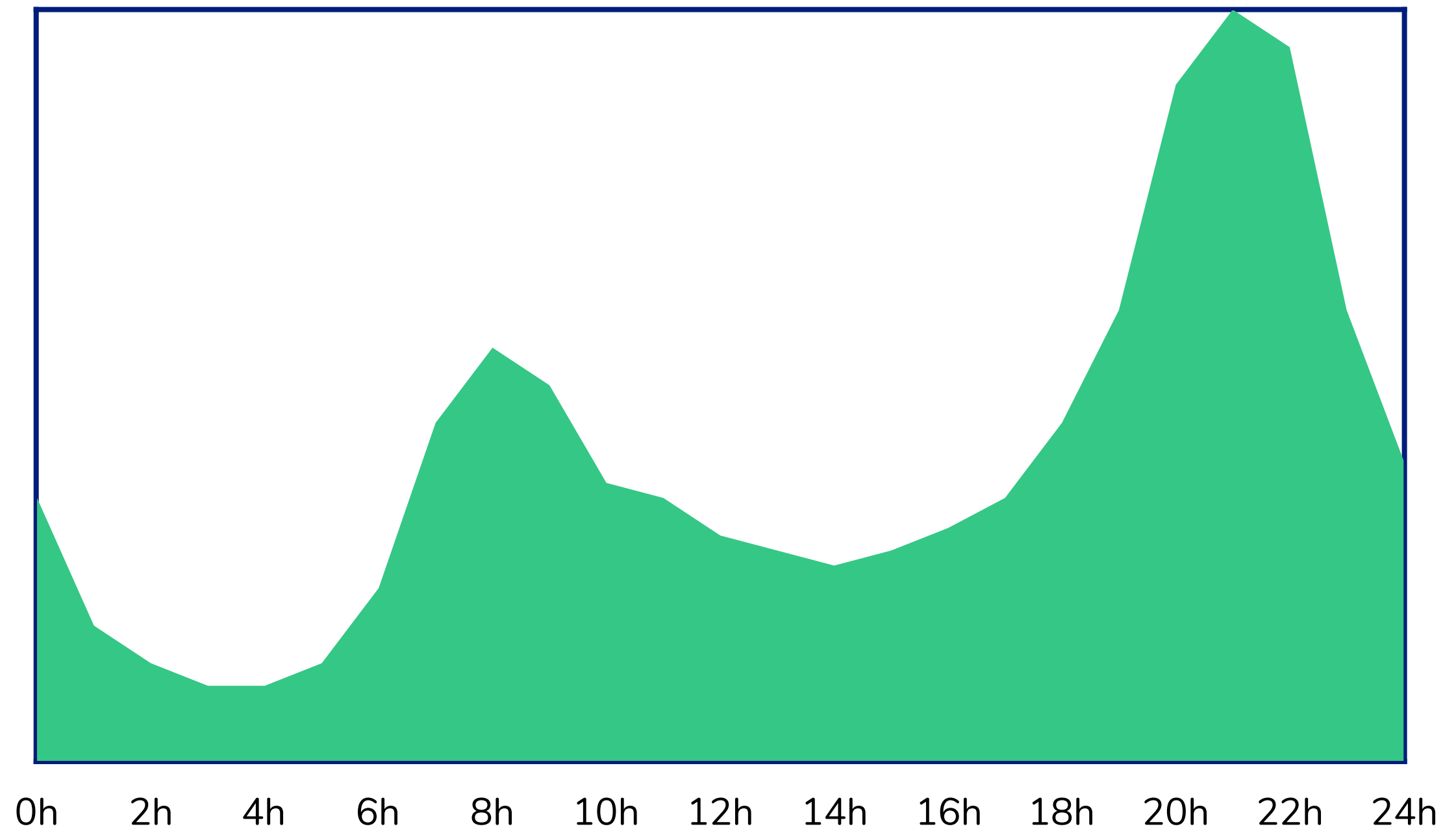


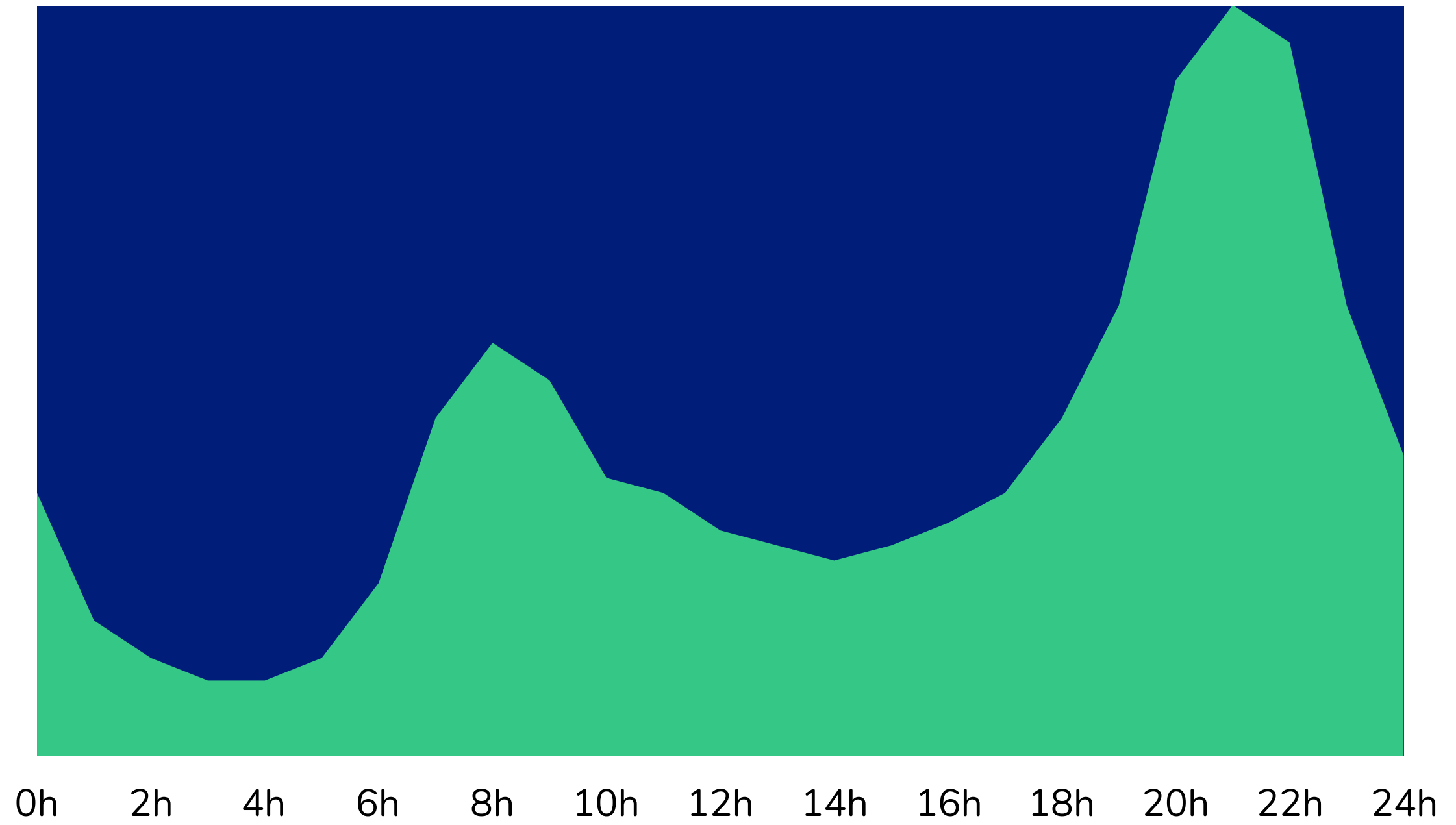
Operations

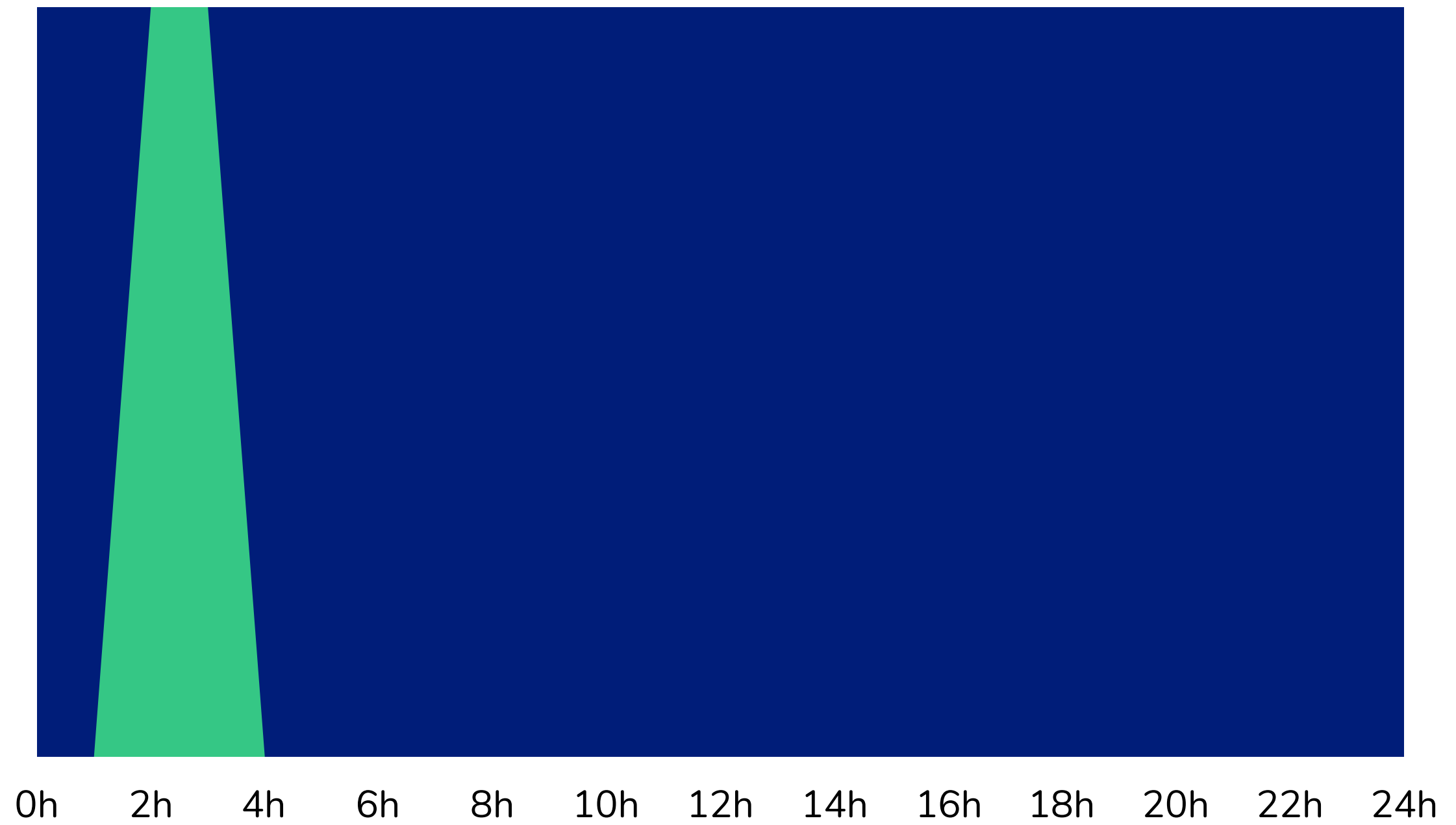
Scalability

Costs











PHP


```
require __DIR__ . '/vendor/autoload.php';

λ(function (array $event) {
    return 'hello ' . $event['name'];
});
```

Bref

github.com/mnapoli/bref

PHP support

Deployment

Framework integrations

```
use ...;
```

```
$kernel = new App\Kernel(...);
```

```
// $request = Request::createFromGlobals();
```

```
// $response = $kernel->handle($request);
```

```
// $response->send();
```

```
// $kernel->terminate($request, $response);
```

```
$bref = new Bref\Application;
```

```
$bref->httpHandler(new SymfonyAdapter($kernel));
```

```
$bref->run();
```

```
$ bin/console doctrine:query:sql 'SELECT * FROM product'  
# ...
```

```
$ bref cli -- doctrine:query:sql 'SELECT * FROM product'  
# ...
```

Performances

Overhead

	Node	PHP
128M	8ms	320ms
512M	8ms	65ms
1024M	0ms	25ms
2048M	0ms	21ms

API Gateway

+15 ms

Cold starts

	Python	Node	PHP	Java	C#
128M	1ms	21ms	1261ms	3562ms	4387ms
512M	0ms	3ms	336ms	999ms	1223ms
1024M	0ms	2ms	210ms	530ms	524ms

What to expect

Database

Filesystem

Logging

Assets

APCu

Case studies

```
<?php

function foo($x)
{
    return ($x >= 1) && ($x <= 1) && ($x !== 1);
}
```

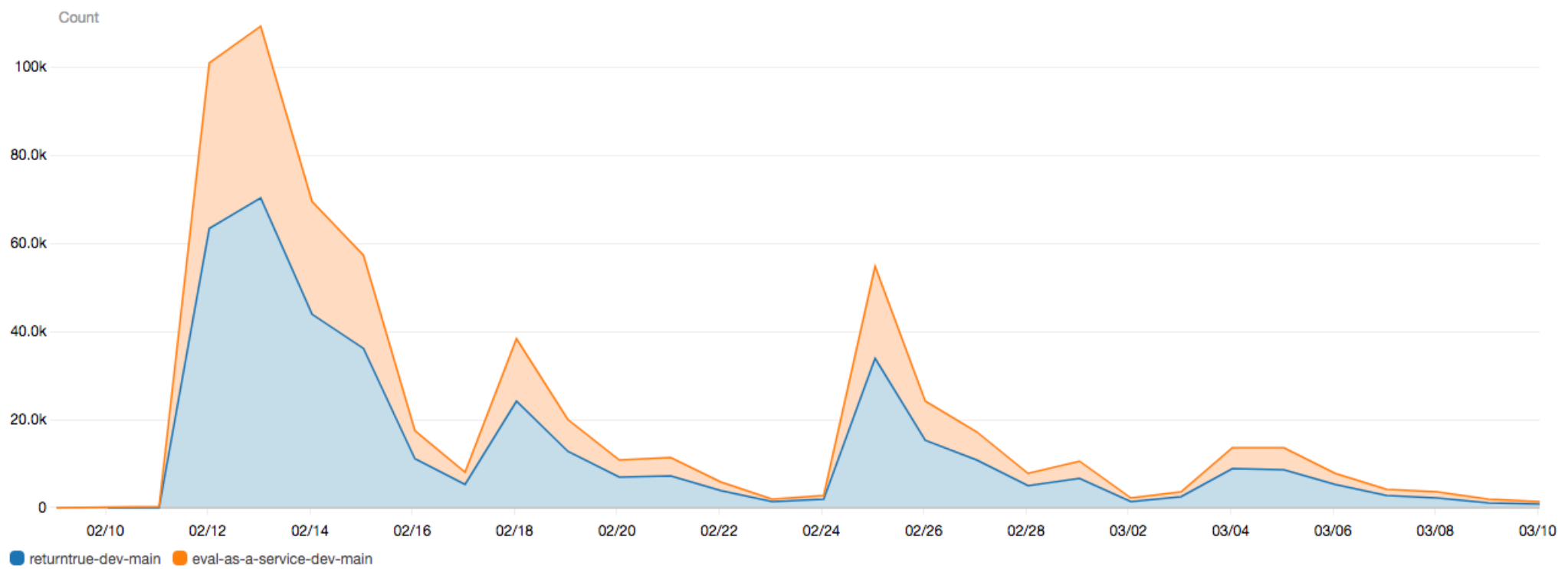
foo(1.) **Submit** Score: 2

true

Well done! Move to the [next step](#)

Return true to win

[returntrue.win](#)



400k HTTP requests
650k executions

\$3

returntrue.win

The screenshot displays a GitHub pull request titled "PR: Update Application.php #1". The pull request is from the "feature-branch-1" branch to the "master" branch, initiated by user "mnapoli". The interface includes tabs for "Code", "Pull requests 1", "Releases", "More", and "Settings". Below the title, there are buttons for "Open", "Conversation 1", "Commits 1", "Checks 1", and "Files changed 1". The commit hash "54a2d5e" is shown with the message "Update Application.php".

The "Checks" section shows a failed "PrettyCI" check from 7 days ago. A "Re-run all" button is available. A detailed view of the "PrettyCI" check is shown on the right, indicating a "Failure" and that it was "built 7 days ago in less than 5 seconds" by user "54a2d5e" (@mnapoli). The check title is "Code formatting".

The "DETAILS" section of the PrettyCI check shows the following output:

```
No configuration file found, running PHP CodeSniffer with PSR-2

FILE: src/Foo.php
-----
FOUND 15 ERRORS AFFECTING 3 LINES
-----
 3 | ERROR | [ ] Each class must be in a namespace of at least one
   |       | level (a top-level vendor name)
 3 | ERROR | [ ] Class name "Foo_test" is not in camel caps format
 3 | ERROR | [x] Opening brace of a class must be on the line after
   |       | the definition
 5 | ERROR | [x] Line indented incorrectly; expected 4 spaces, found
   |       | 0
 5 | ERROR | [ ] Visibility must be declared on method "test"
```

PrettyCI

prettyci.com



2 approving reviews

[Show all reviewers](#)



4 pending and 1 successful checks

[Hide all checks](#)



continuous-integration/appveyor/branch Pending — Waiting for AppVeyor ...

[Details](#)



continuous-integration/appveyor/pr Pending — Waiting for AppVeyor build ...

[Details](#)



continuous-integration/travis-ci/pr Pending — The Travis CI build is in prog...

[Details](#)



continuous-integration/travis-ci/push Pending — The Travis CI build is in p...

[Details](#)



PrettyCI — Code formatting

[Details](#)



This branch has no conflicts with the base branch



built **7 days ago** in **less than 5 seconds**

Professionnels, économisez du temps et de l'argent sur vos factures énergétiques

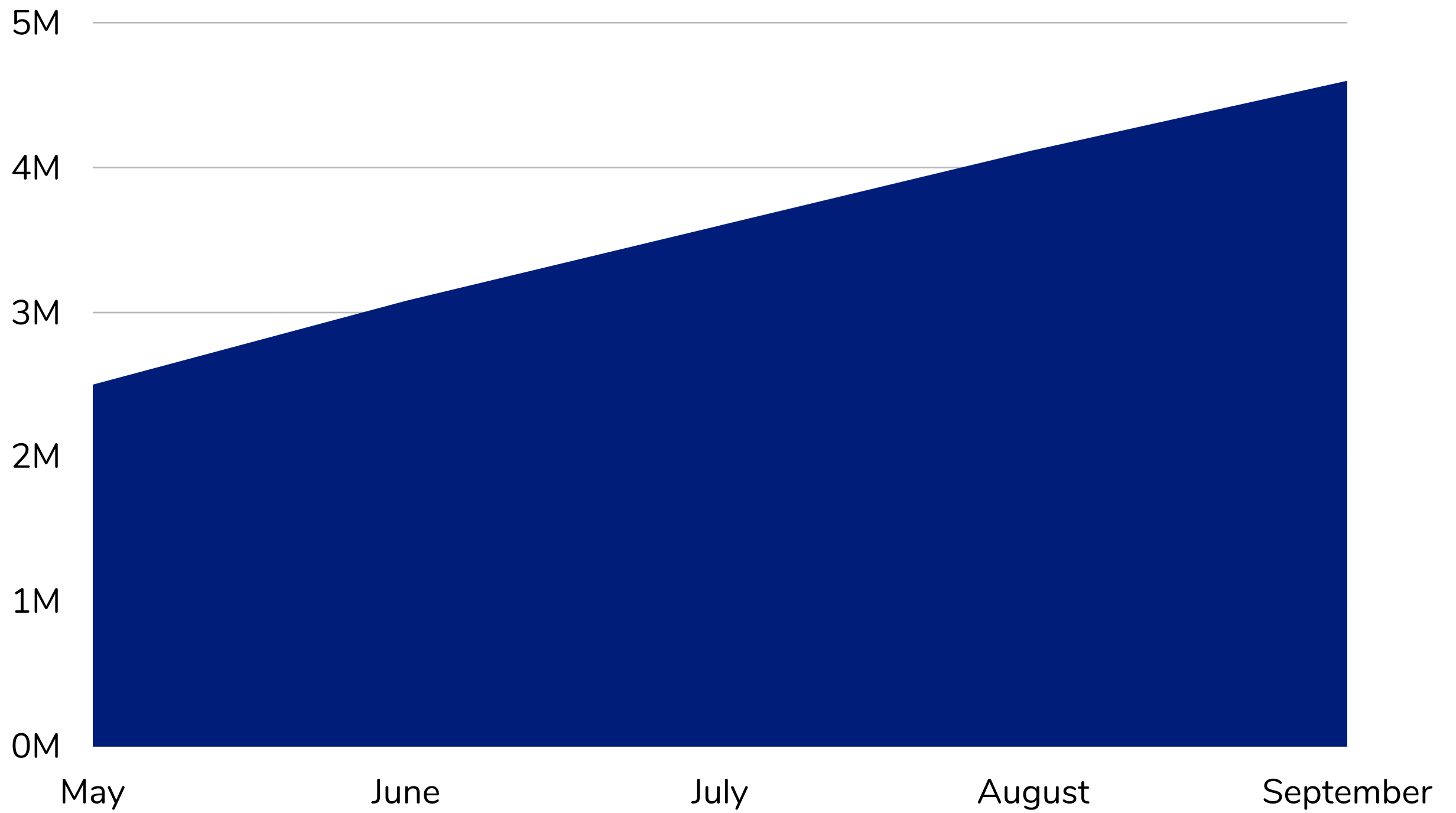
Enoptea, la solution pour la gestion de vos coûts énergétiques

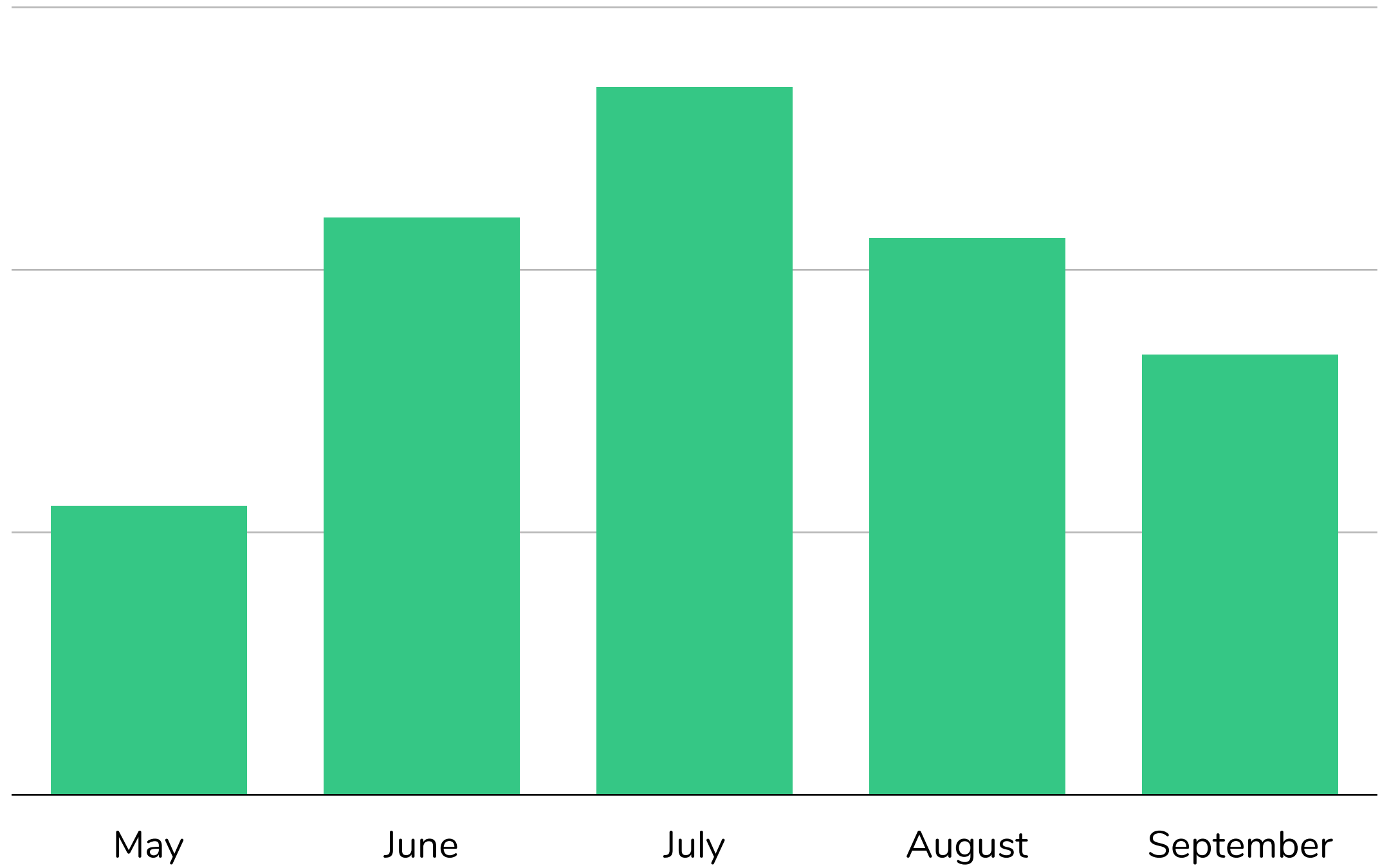
DÉCOUVRIR NOTRE SOLUTION

Enoptea

enoptea.fr

170k jobs/day





\$800 -> \$90

?

is
serverless
mature?

hack!

experiment!

learn!

@matthieunapoli

github.com/mnapoli/bref

prettyci.com