Serverless & PHP

Where did the server go?

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Serverless

Resource

Service

Storage as a Service

Database as a Service

Cache as a Service

Auth as a Service

Search as a Service

Manage less

Scale more

Pay per use
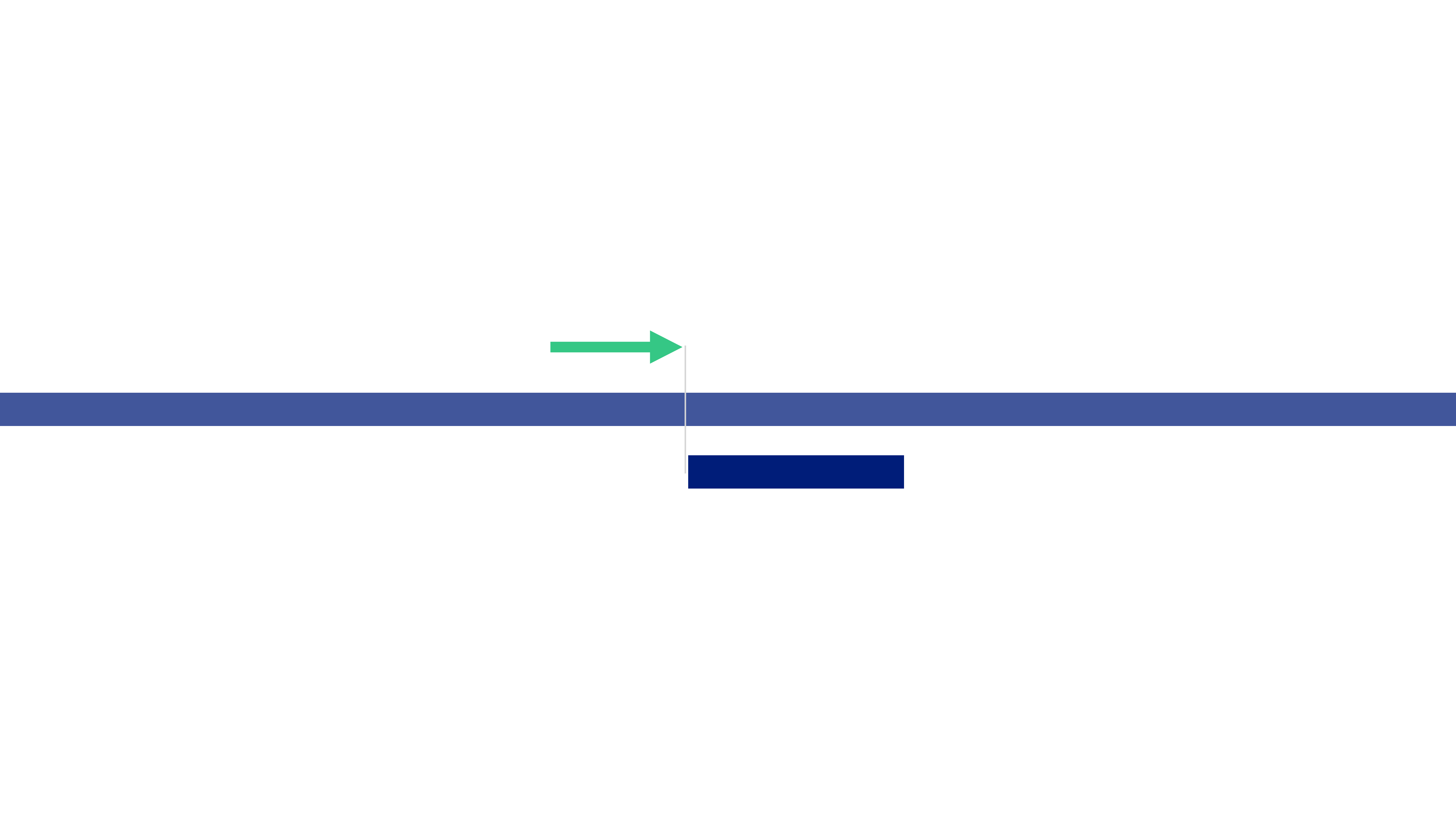
Function as a Service

Python

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

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

    callback(null, result);
};
```
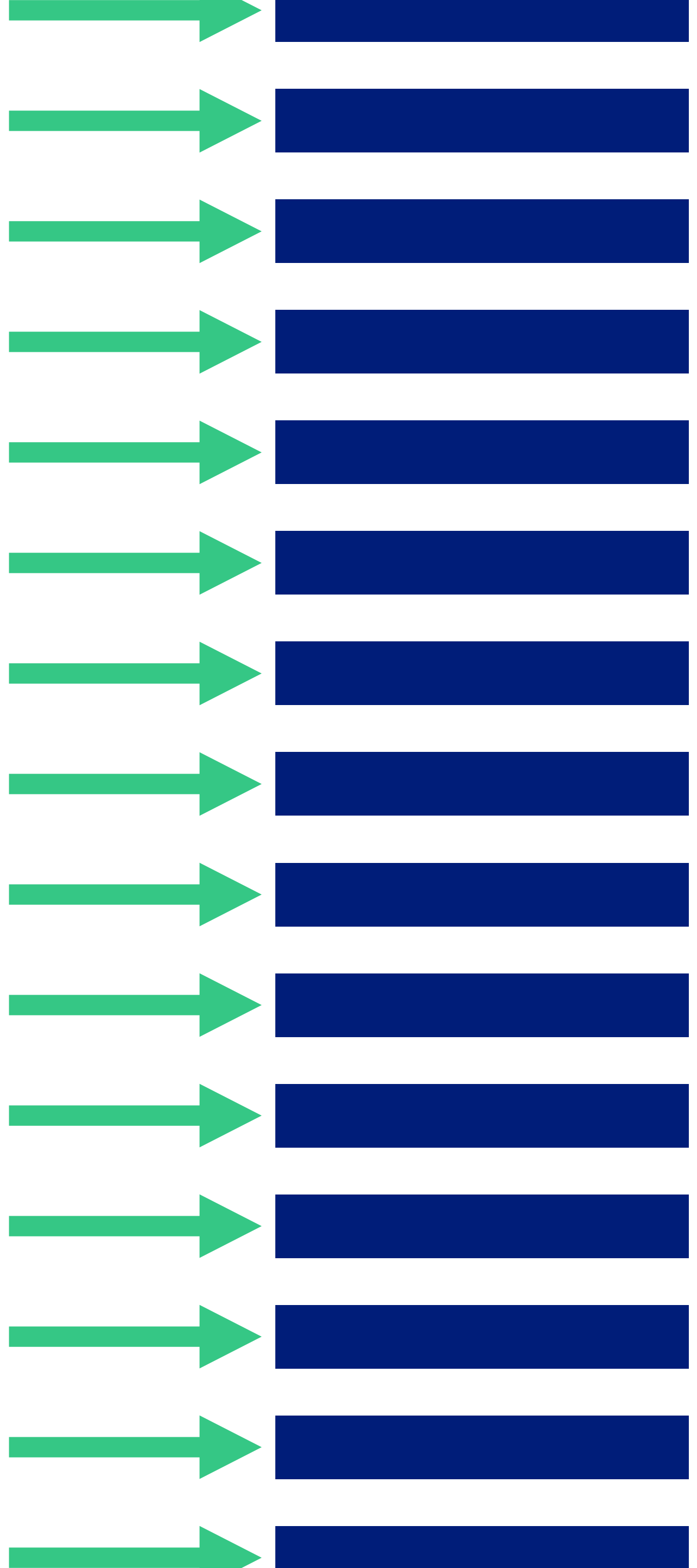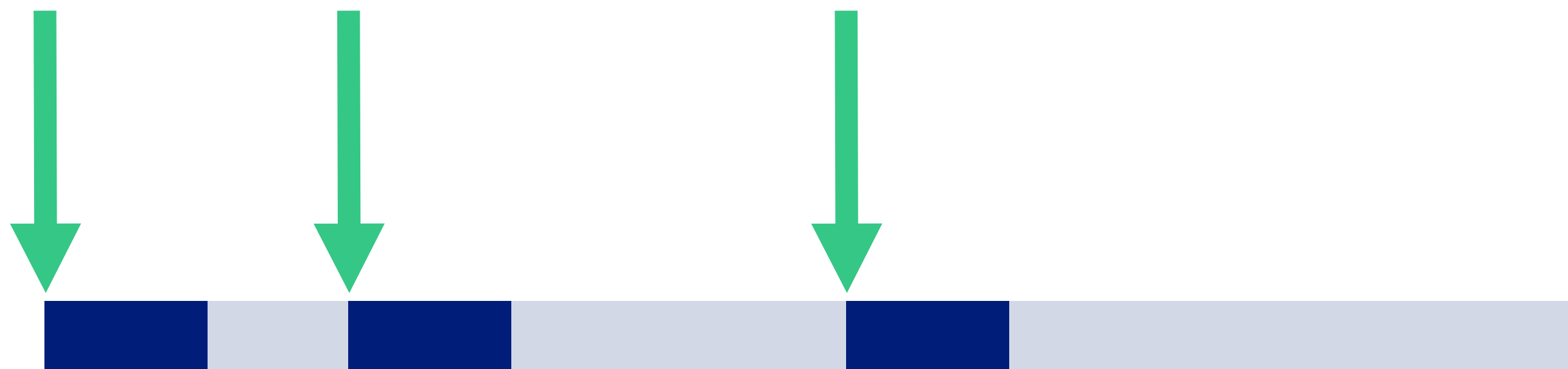
JavaScript

300ms

$0.0000002 + 3 × $0.000000208
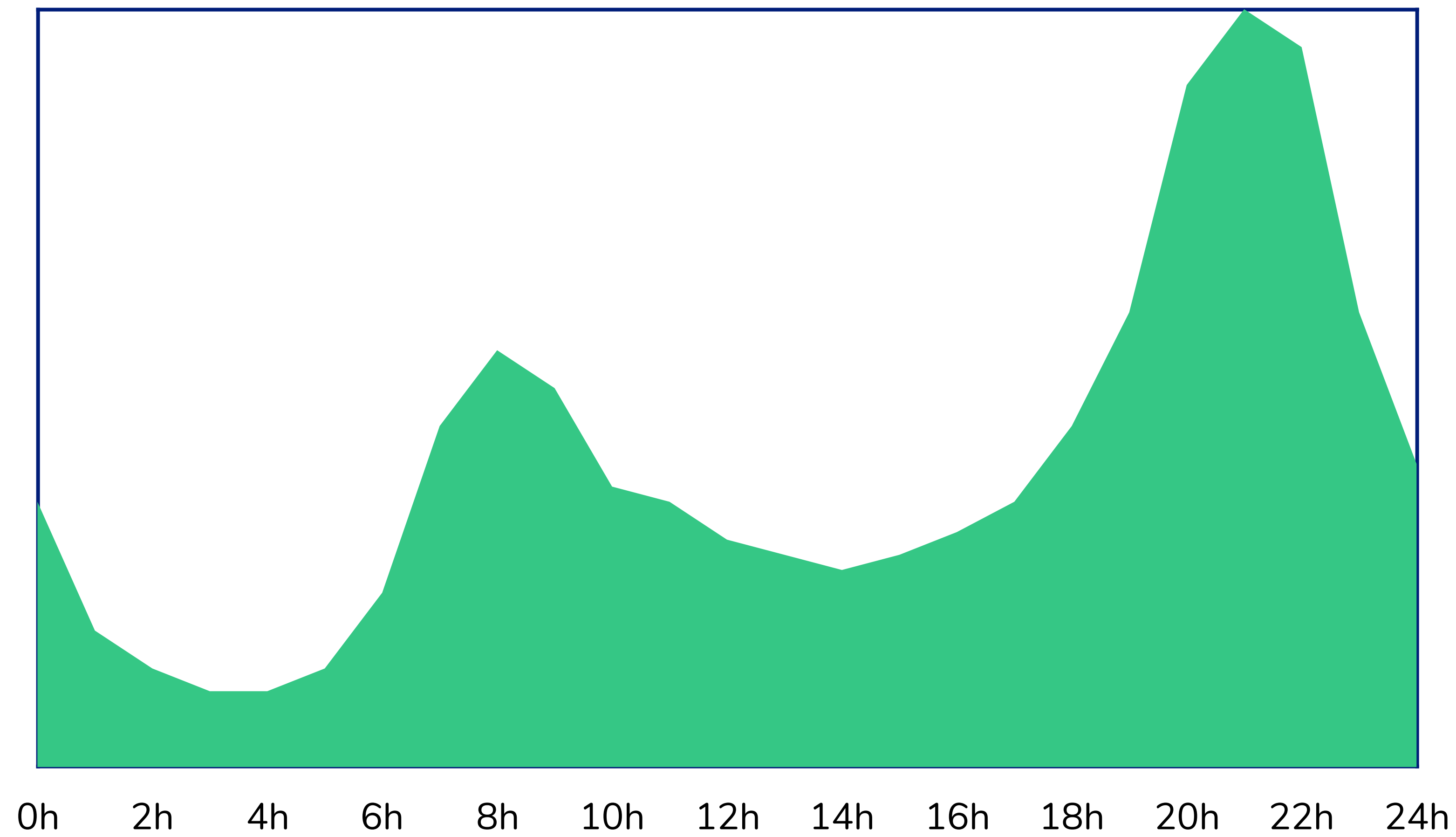
0h   2h   4h   6h   8h   10h   12h   14h   16h   18h   20h   22h   24h

0h   2h   4h   6h   8h   10h   12h   14h   16h   18h   20h   22h   24h
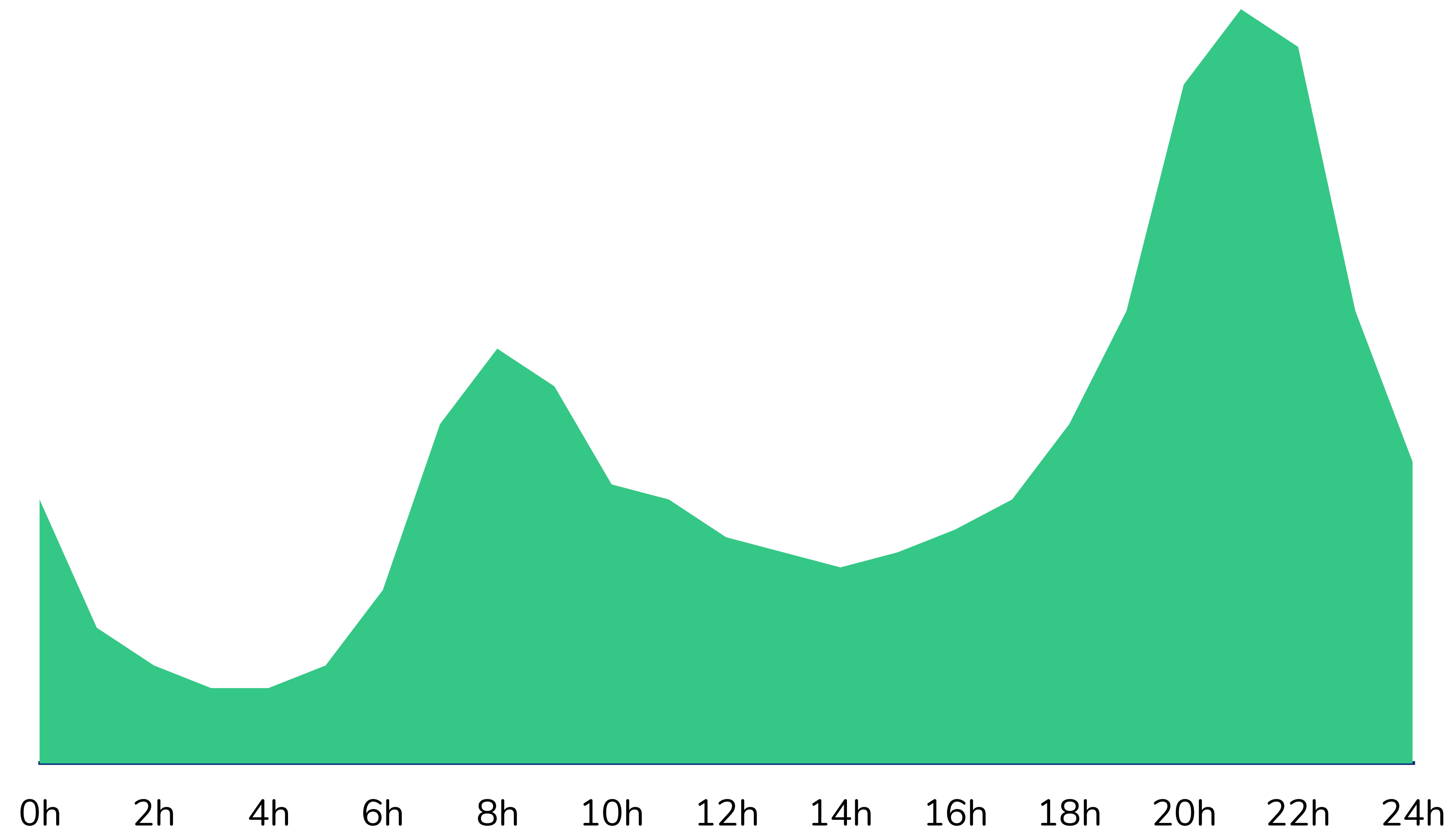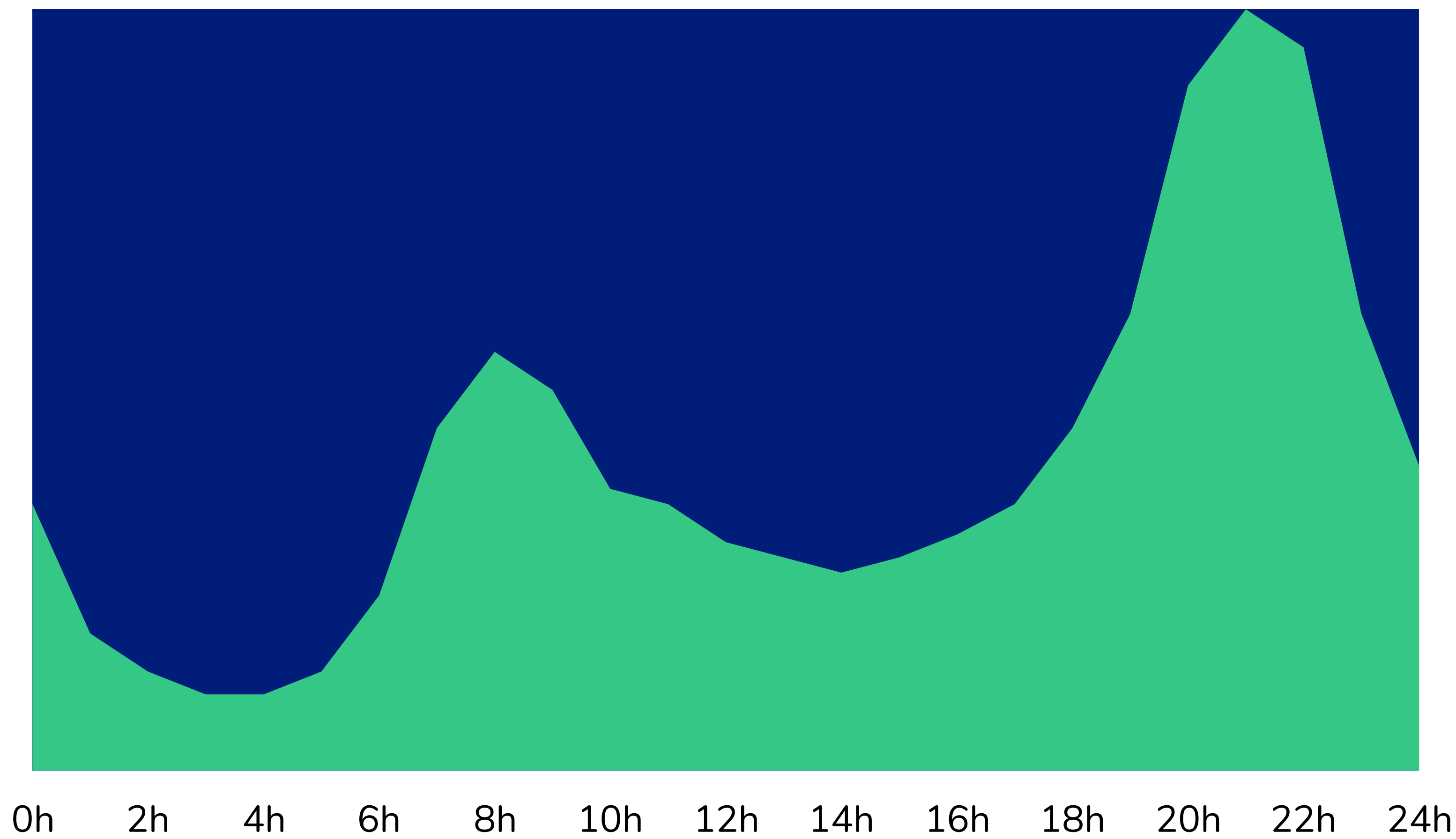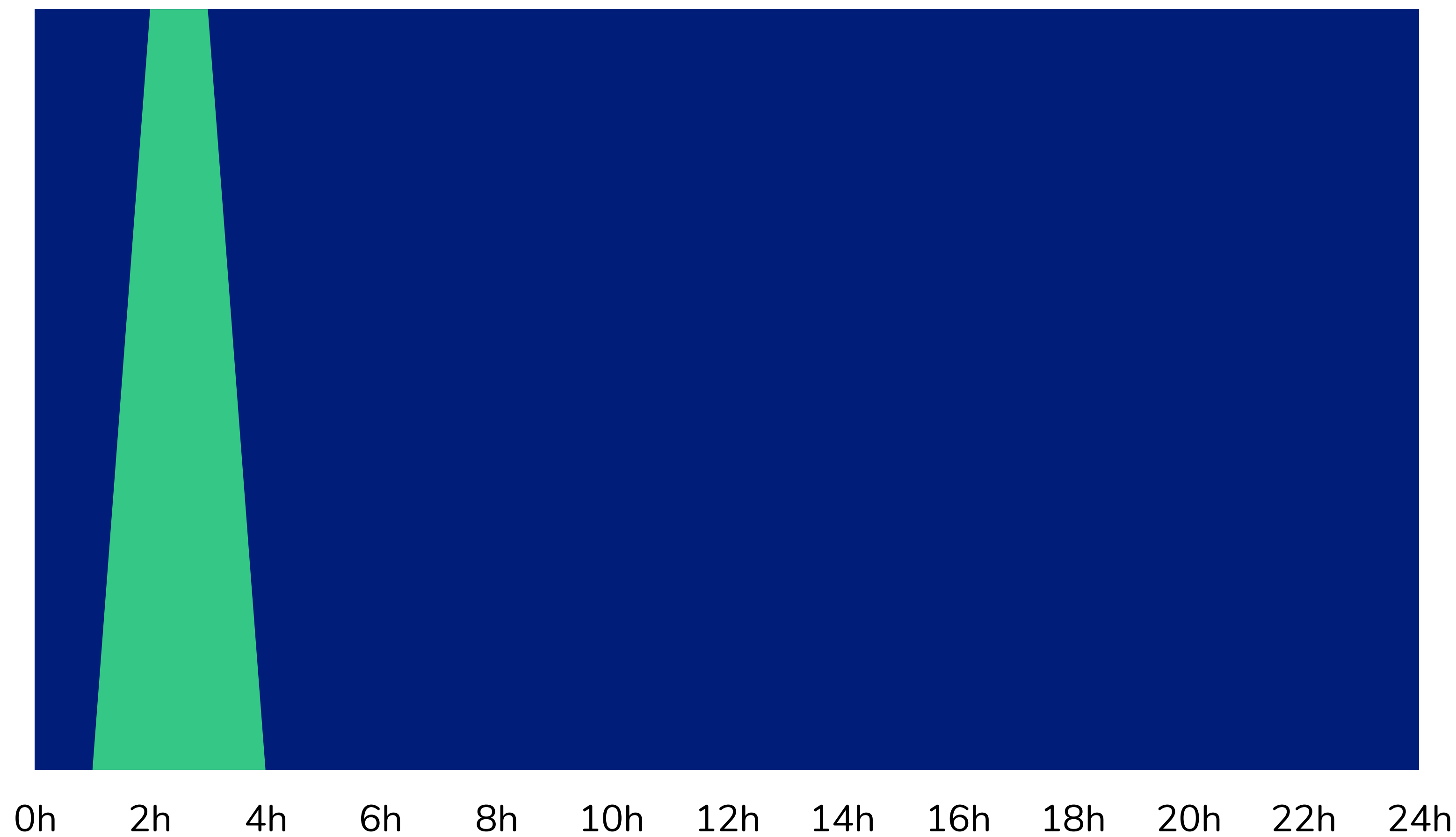
Manage less

Scale more

Pay per use

PHP

Bref

bref.sh

Choices

Documentation

Tools

3 "runtimes"

PHP function

```php
<?php

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

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

HTTP

PHP-FPM

Console

```
$ bin/console doctrine:query:sql 'SELECT * FROM users'

...


$ vendor/bin/bref cli function-name -- doctrine:query:sql 'SELECT * FROM users'

...
```

Serverless framework

serverless.com

serverless.yml

```yaml
service: myapp


provider:
    name: aws


functions:

    api:
        handler: public/index.php
        # PHP runtime:
        runtime: provided
        layers:
            - ${bref:layer.php-73-fpm}
        # HTTP events
        events:
            -   http: 'ANY /'
            -   http: 'ANY /{proxy+}'
```

Deployment

```
$ composer install -o --no-dev
...

$ serverless deploy
...
Service deployed
endpoints:
  ANY - https://fd8t9cbq6l.execute-api.us-east-1.amazonaws.com/dev
...
```

Symfony

Laravel

...

Performances
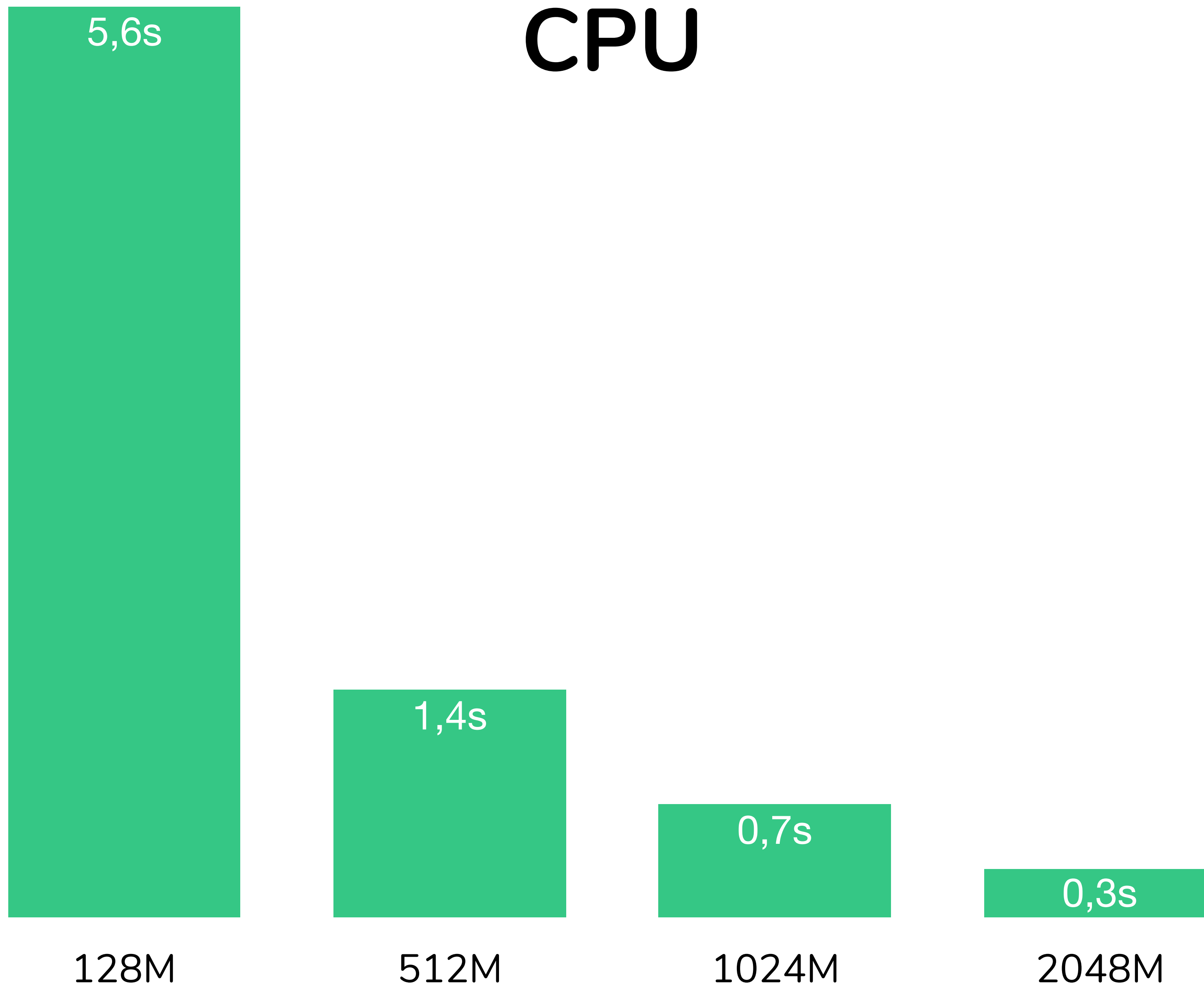
Response time

	PHP "hello world"	Symfony "hello world"
128M	10ms	58ms
512M	1ms	4ms
1024M	**1ms**	**4ms**
2048M	1ms	4ms

Cold starts

Python	Node	Go	PHP	Java	C#
200ms	200ms	250ms	**250ms**	400ms	600ms

Case studies

externals.io

- Website (55ms) + cron

- Custom framework, MySQL

- 100,000 requests/month

- 50$/month -> $17/month

$0.04

PR: Update Application.php #1

Open mnapoli wants to merge 1 commit into `master` from `feature-branch-1`

Conversation 1 · Commits 1 · Checks 1 · Files changed 1

54a2d5e — Update Application.php

PrettyCI
Failed — 7 days ago — Re-run all

PrettyCI

PrettyCI

✕ Failure

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

54a2d5e by @mnapoli

Code formatting

DETAILS

```
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"
```
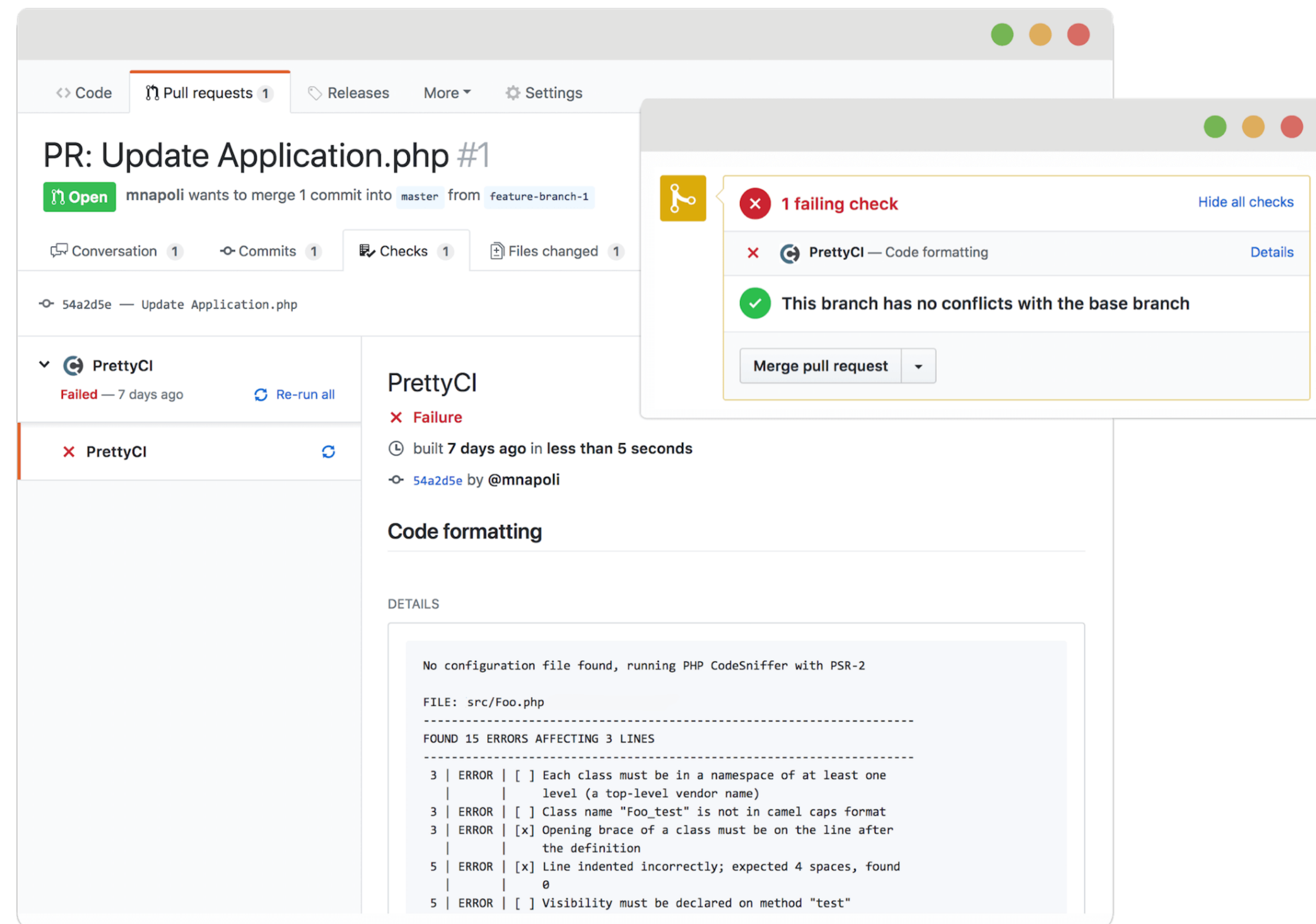
✕ **1 failing check**   Hide all checks

✕ PrettyCI — Code formatting   Details

✓ This branch has no conflicts with the base branch

Merge pull request ▾

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**

Enoptea

VOTRE RÉFÉRENT ÉNERGIE

Nos Solutions   Qui Sommes-Nous?   Blog   Contactez-Nous

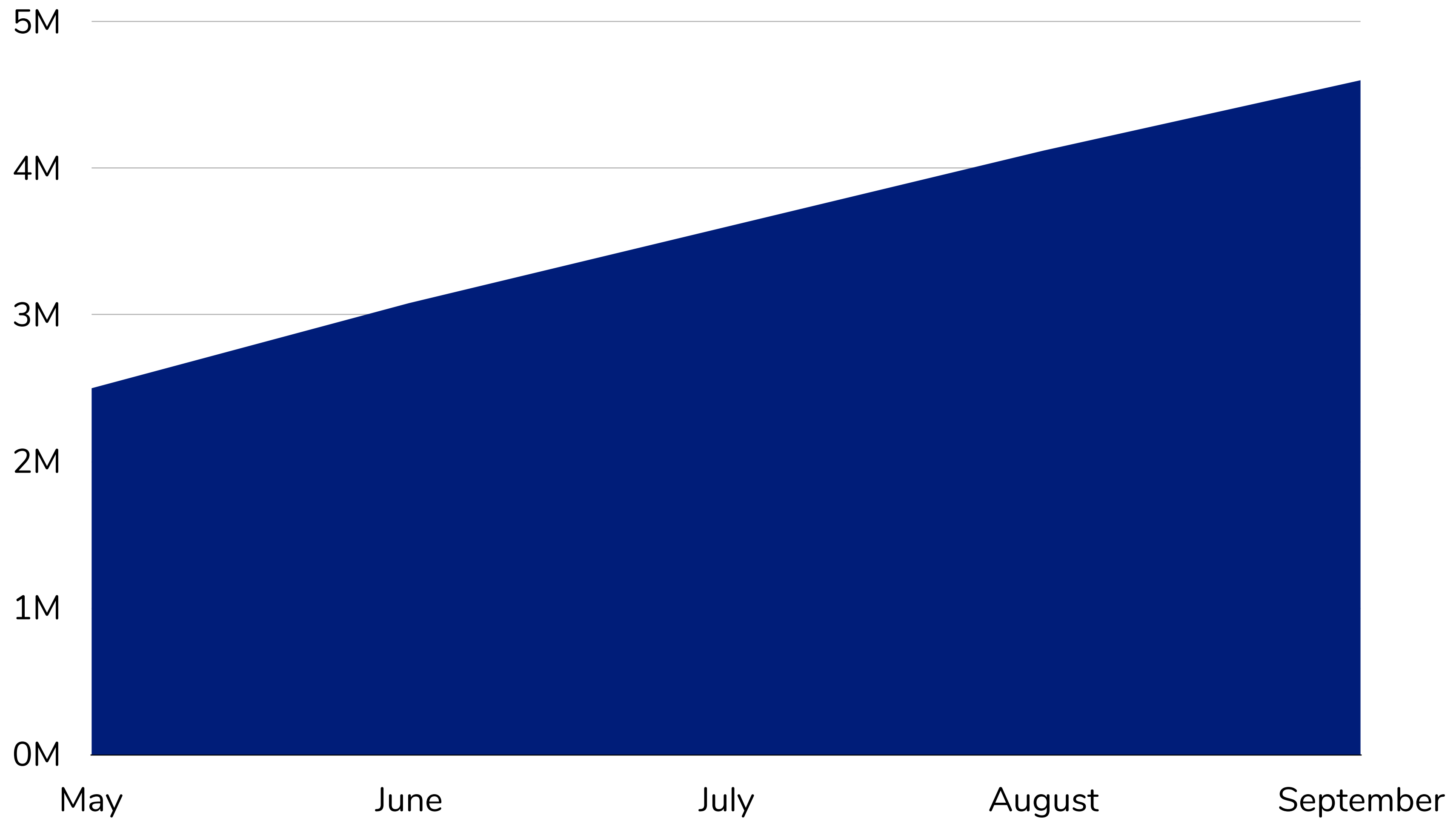Professionnels, économisez du temps et de l'argent sur vos factures énergétiques

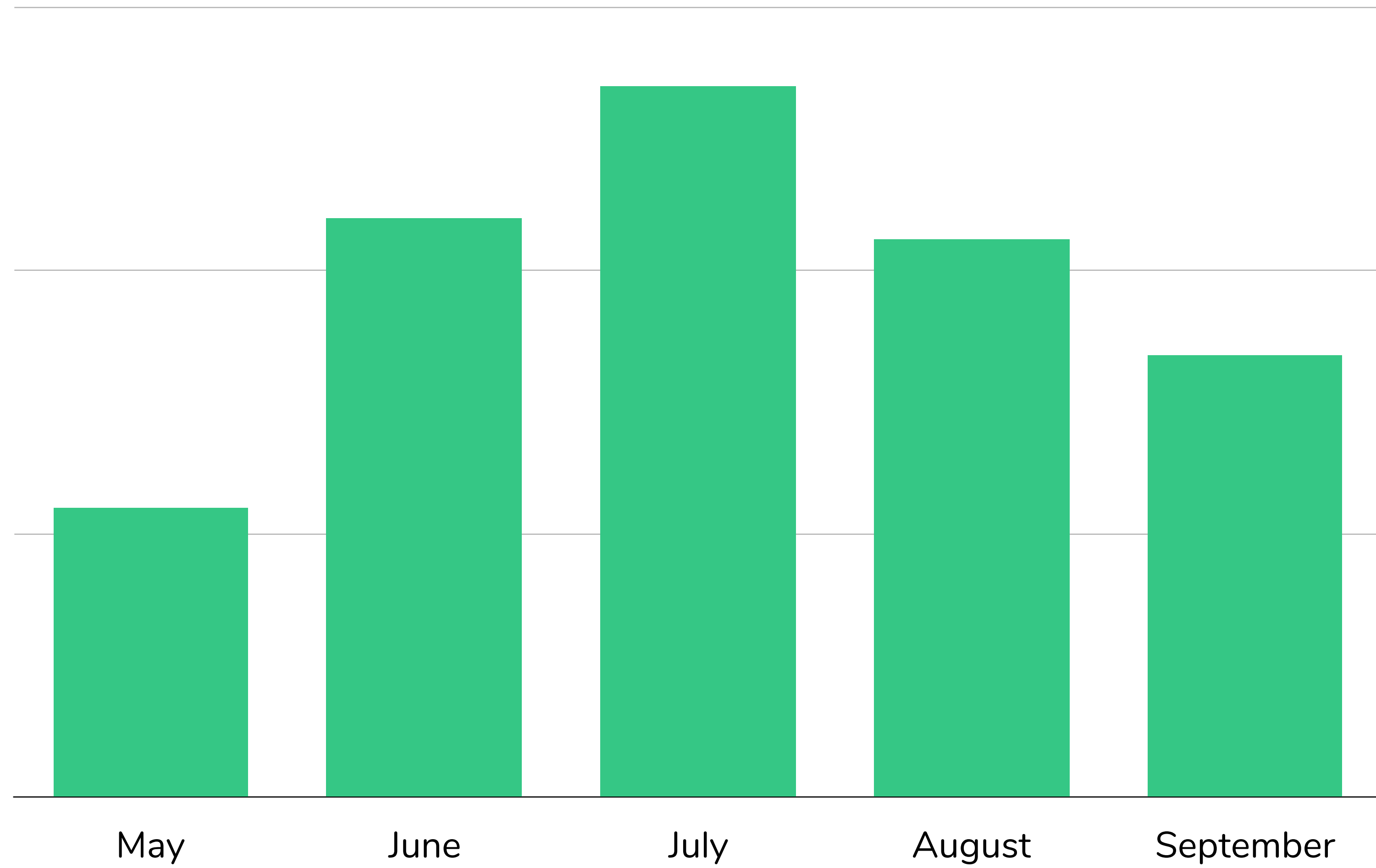Enoptea, la solution pour la gestion de vos coûts énergétiques

DÉCOUVRIR NOTRE SOLUTION

Enoptea

enoptea.fr

170k jobs/day

$800 -> $90

Sua Música

suamusica.com.br

- API (90ms) + website (130ms)

- Phalcon, MySQL

- 40M requests/day (Alexa's top 3000)

- 2500 concurrent lambdas

- ECS (EC2) -> Lambda: 25% savings

is
the future
serverless?

is
PHP's future
serverless?

try!

learn!

share!

bref.sh

cost-calculator.bref.sh