Page Speed Optimizer

Magento 2 Module — Complete User Guide

Complete Guide — Every Screen, Every Button, Step by Step

Speed up your Magento storefront from the admin: convert catalog images to lighter WebP/AVIF, lazy-load images, minify and defer HTML/CSS/JS, preload key resources, and run live Google PageSpeed Insights diagnostics to measure your score. Hyvä and Luma compatible, licensed via the eTechFlow portal.

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1. Introduction

Page Speed Optimizer improves your Magento storefront's loading performance directly from the admin. It converts catalog images to lighter WebP/AVIF formats and lazy-loads them, applies code optimizations (HTML/CSS/JS minification, JavaScript and font deferral, resource preloading), and runs Google PageSpeed Insights diagnostics so you can see your performance score and track it over time.

The module is licensed through the eTechFlow portal. Until a valid key is entered for your domain, the module stays locked. This guide covers configuring and using the module.

2. Configure Page Speed Optimizer

Below the License section are the module's settings, grouped into General, Google PageSpeed Insights, Image Optimization and Code Optimization. Set these to control what the module does.

2.1 General & Google PageSpeed Insights

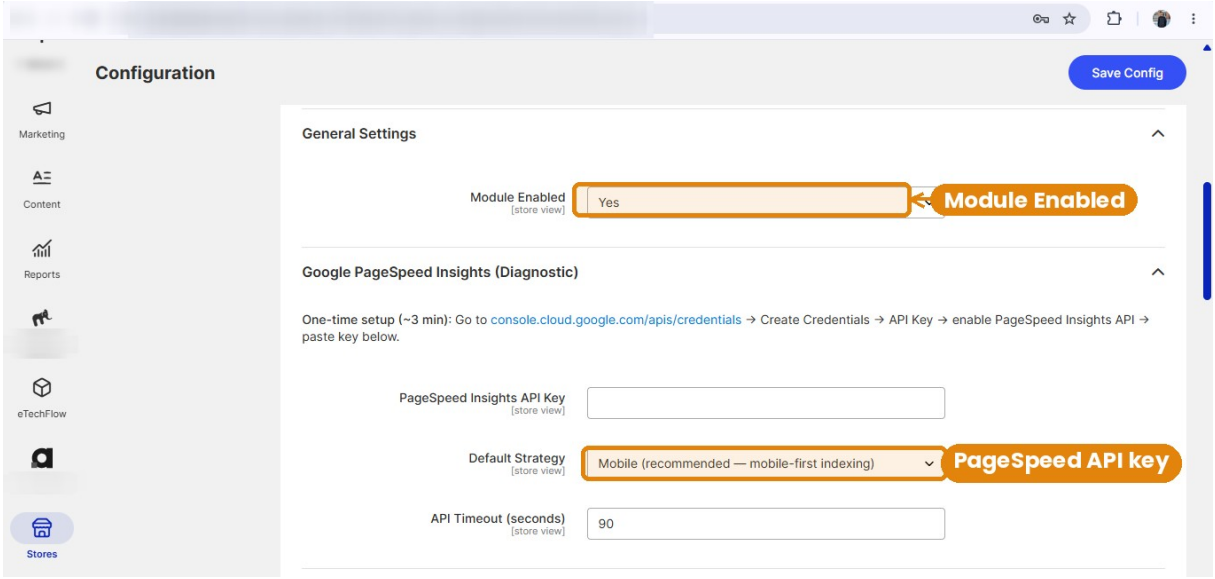

Figure 1 — General Settings (Module Enabled) and the Google PageSpeed Insights (Diagnostic) group with the API key, default strategy and timeout.

[Module Enabled] Master switch. Yes turns the module on; No leaves it dormant.

[PageSpeed Insights API Key] A free Google API key (console.cloud.google.com → Create Credentials → API Key → enable PageSpeed Insights API). Required for the Diagnose tool.

[Default Strategy] Mobile (recommended — mobile-first indexing) or Desktop — the device profile used by the Diagnose tool by default.

[API Timeout (seconds)] How long to wait for the PageSpeed API before giving up (default 90).

2.2 Image Optimization

These settings convert catalog images to WebP/AVIF and lazy-load them. Run a one-time bulk conversion with the CLI command bin/magento etechflow:pso:optimize-images.

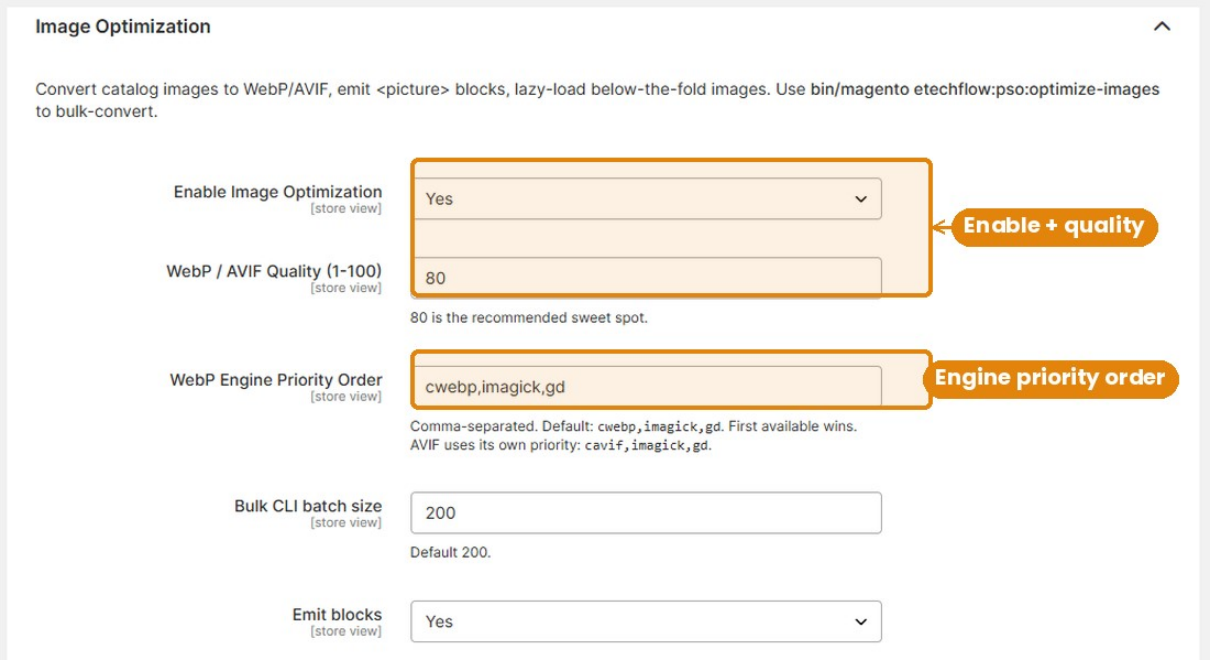

Figure 2 — Image Optimization: Enable, WebP/AVIF quality, engine priority order, bulk batch size and Emit <picture> blocks.

[Enable Image Optimization] Yes turns on WebP/AVIF conversion and serving.

[WebP / AVIF Quality (1-100)] Compression quality; 80 is the recommended sweet spot between size and looks.

[WebP Engine Priority Order] Which encoders to try, in order (default cwebp, imagick, gd). The first available on your server wins.

[Bulk CLI batch size] How many images the bulk CLI processes per batch (default 200).

[Emit blocks] Yes outputs <picture> blocks so browsers pick WebP/AVIF with a safe fallback.

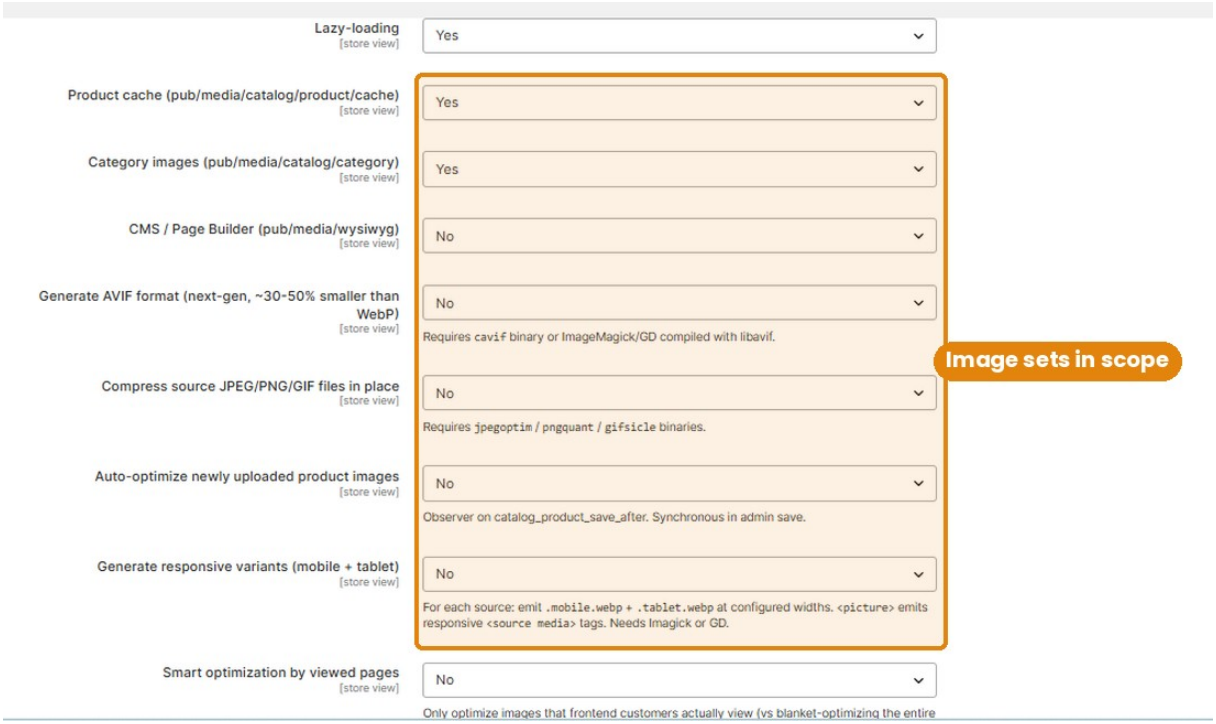

Figure 3 — Image Optimization scope: choose which image sets are optimized (product cache, category images, CMS/Page Builder), plus AVIF, source compression, auto-optimize on upload, responsive variants and smart "only what customers view" optimization.

Use these switches to control WHERE optimization applies (product cache, category, CMS images), whether to also generate AVIF, compress the original JPEG/PNG/GIF files, auto-optimize newly uploaded product images, emit responsive mobile/tablet variants, and only optimize images customers actually view.

2.3 Code Optimization

Runtime HTML/CSS/JS optimizations. Test on staging first — deferring JavaScript can break themes that rely on synchronous scripts.

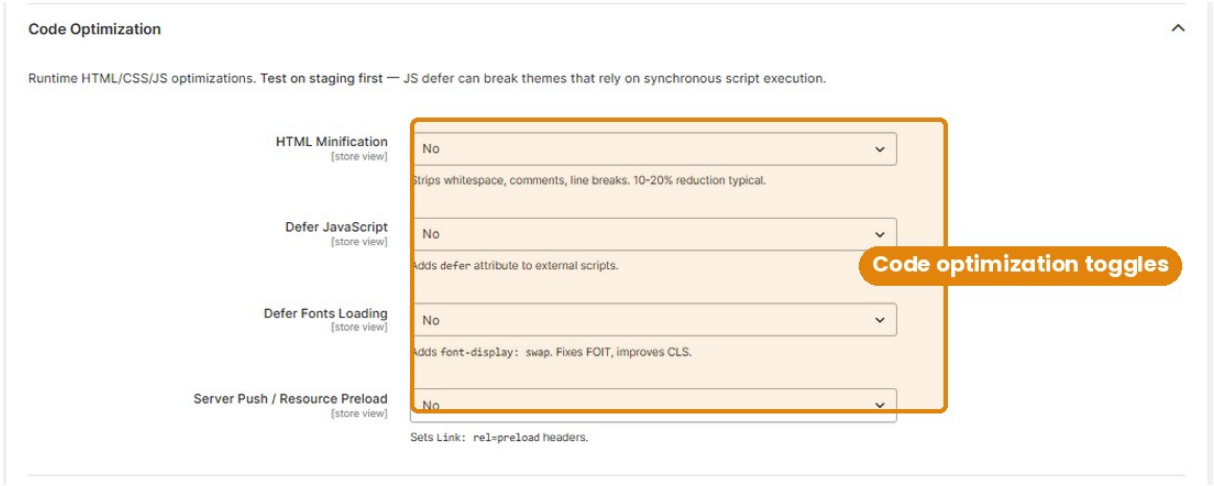

Figure 4 — Code Optimization: HTML minification, defer JavaScript, defer fonts loading, and server push / resource preload.

[HTML Minification] Strips whitespace, comments and line breaks (10–20% smaller HTML typically).

[Defer JavaScript] Adds the defer attribute to external scripts so they don't block rendering.

[Defer Fonts Loading] Adds font-display: swap to fix invisible text (FOIT) and improve CLS.

[Server Push / Resource Preload] Sets Link: rel=preload headers so the browser fetches key assets earlier.

3. Using Page Speed Optimizer

Once licensed, the module adds tools under the eTechFlow admin menu. The main one is Page Speed Diagnose.

3.1 Run a Page Speed Diagnose

Open Page Speed Diagnose from the eTechFlow menu. Enter the public URL to test, pick Mobile or Desktop, and click Run diagnostic. Each run calls Google's PageSpeed Insights API and takes 15–45 seconds. The URL must be publicly reachable — localhost and .test domains will fail.

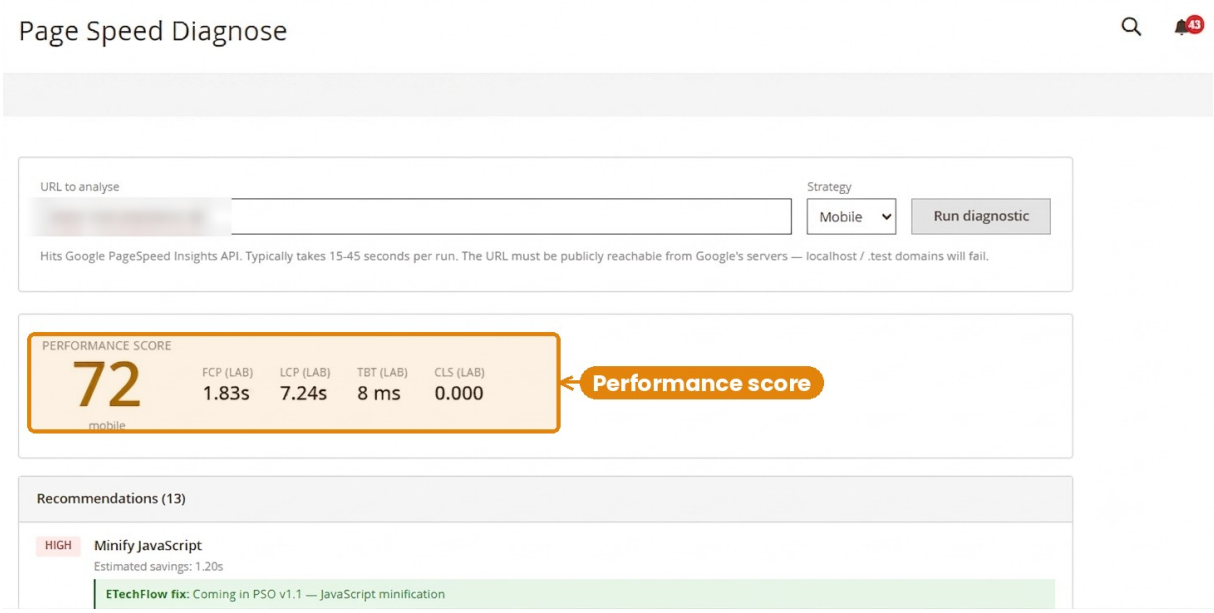

Figure 5 — Page Speed Diagnose (Mobile): a performance score of 72 with the lab metrics (FCP, LCP, TBT, CLS) and a list of recommendations.

[URL to analyse] The public page address to test (defaults to your store's base URL).

[Strategy] Mobile or Desktop — the device profile PageSpeed scores the page against.

[Run diagnostic] Calls the Google PageSpeed Insights API for the URL + strategy and returns the score and recommendations.

3.2 Reading the results

A finished run shows the overall Performance Score, the key lab metrics — FCP (First Contentful Paint), LCP (Largest Contentful Paint), TBT (Total Blocking Time) and CLS (Cumulative Layout Shift) — and a numbered list of recommendations, each tagged by impact (High/Medium/Low). Where the module can help, a green “ETechFlow fix” note explains how (e.g. JavaScript minification or Critical CSS extraction). Run both Mobile and Desktop for the same URL to compare.

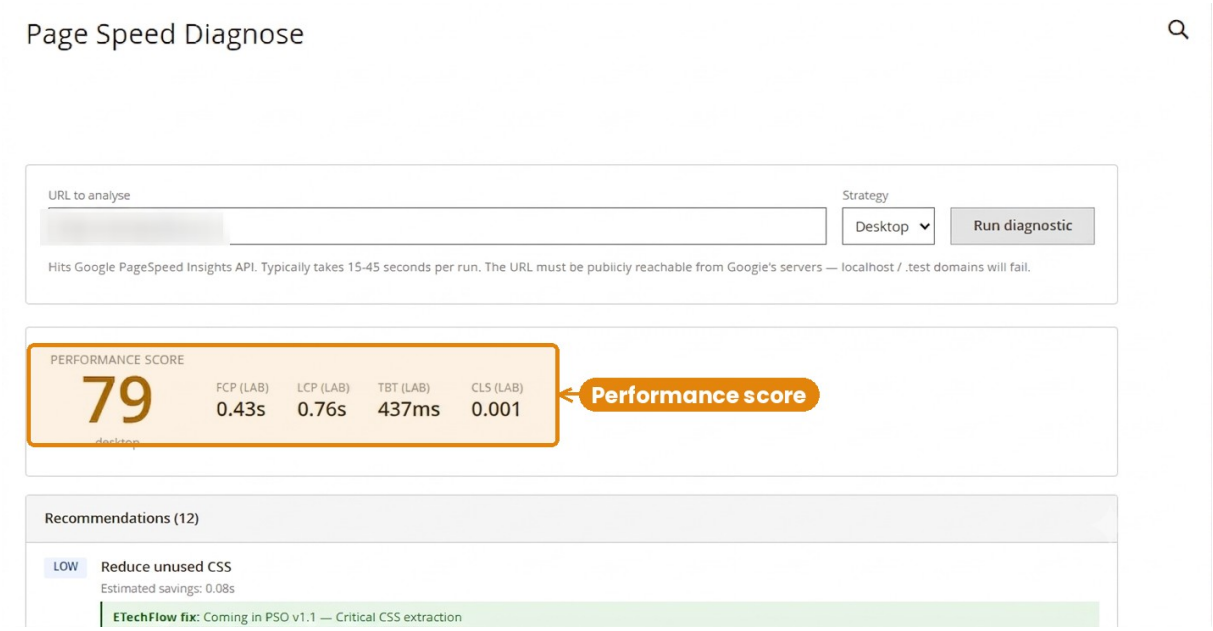

Figure 6 — Page Speed Diagnose (Desktop): the same URL scored on the desktop profile (79), for an at-a-glance comparison with the mobile run.

3.3 The optimized storefront

With Image Optimization on, catalog images are served in lighter WebP/AVIF and lazy-loaded. You can confirm it on the storefront: open your browser DevTools (F12) → Elements, and inspect a product image — it carries loading="lazy" and an optimized image source.

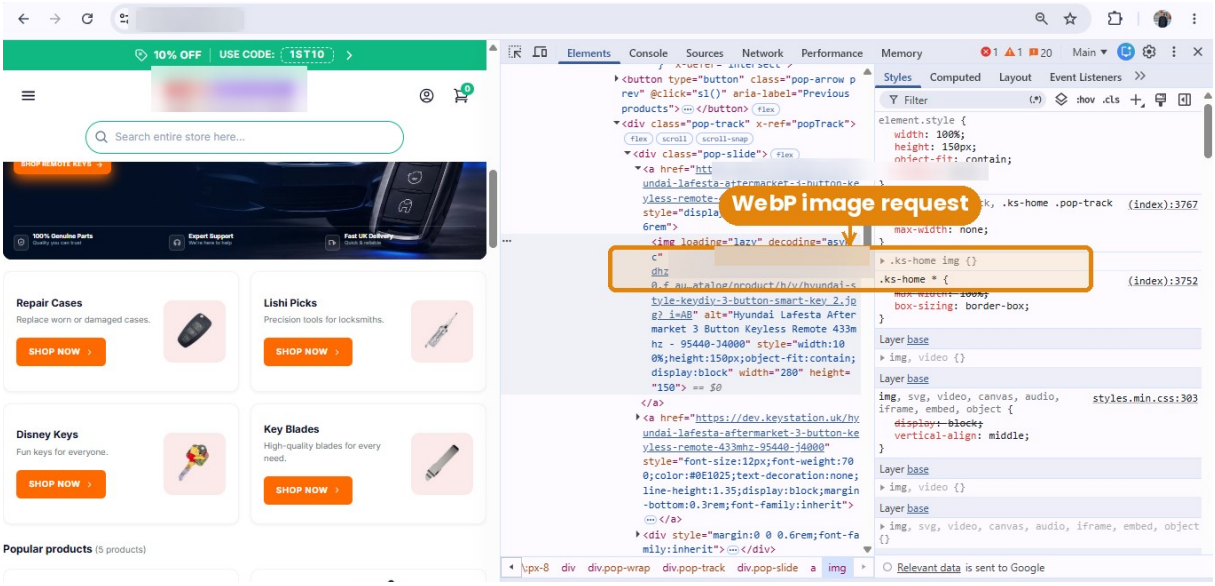

Figure 7 — The storefront with optimization live: a product image rendered with loading="lazy" and an optimized (WebP) source, so it loads only when needed and weighs less.

3.4 Other tools & staying up to date

Page Speed Optimizer also includes a Page Speed Trends dashboard (charts your scores over time), a Cron Tasks List (confirms background jobs are healthy) and an Image Optimization Log (records every image converted and the disk space saved) — all under the eTechFlow admin menu.

When a newer version is published, the module shows an update banner at the top of its pages, e.g. “eTechFlow Page Speed Optimizer 2.5.6 is available (you have 2.5.4)”. Update to the latest version to receive the newest features and fixes.

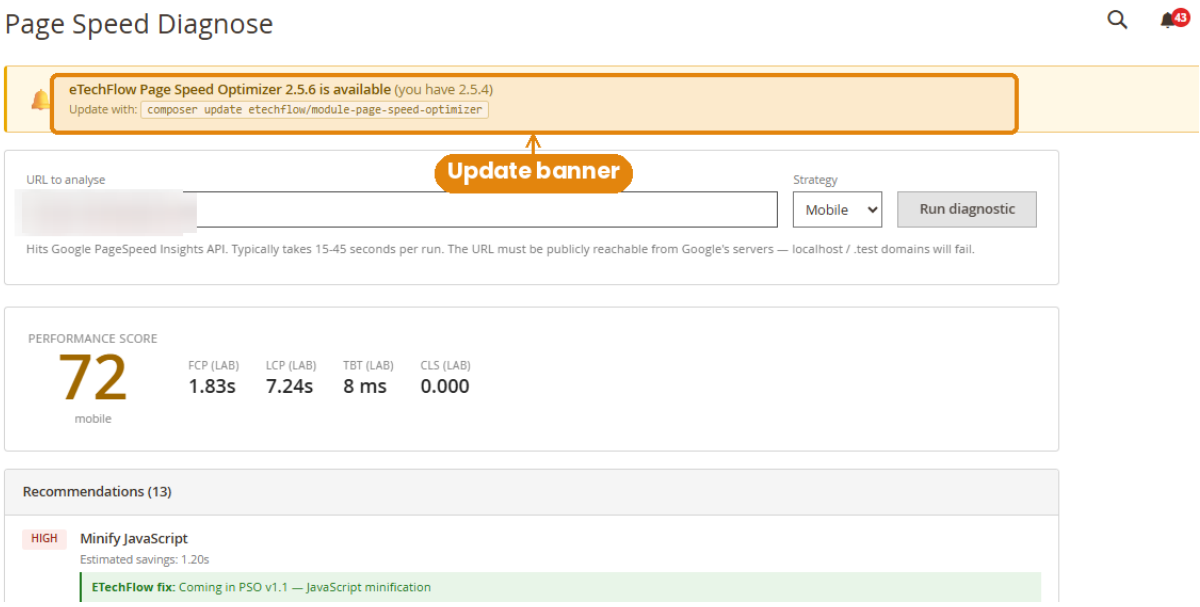

Figure 8 — The Diagnose page showing the update banner.

4. Support & Contact

For help with Page Speed Optimizer, licensing, or installation, contact eTechFlow support. We respond to licence and configuration questions and can assist with setup on request.

Email: support@etechflow.com

Website: https://etechflow.com