

# Web Sustainability Guidelines

## Summary Table & Checklist

<b>2.1</b>	Display any variables that have a negative impact on your project				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Identify existing or potential negative external variables affecting a project. Disclose these in a publicly available resource, identifying areas where digital sustainability can be improved. Perform this audit at the start of your project and at regular intervals.				
	<b>Impact &amp; Effort</b>	Medium		Medium	
	<b>GRI</b>	Medium	Medium	Medium	Medium
<b>2.2</b>	Understand visitor requirements or constraints, resolving barriers to access				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Identify primary and secondary target visitors. Evaluate and define their needs through quantitative and/or qualitative research, testing, or analytics. Ensure your visitors and affected communities are consistently and closely involved in the research and testing process.				
<input type="checkbox"/>	Account for potential visitor constraints, such as the device age, operating system choice or version, browser, VPN use, and connection speeds when designing and assessing the quality of user experiences.				
<input type="checkbox"/>	Conduct internal and user research to identify whether a technical, material, or human constraint might require adaptations to reduce barriers or improve access to content.				
<input type="checkbox"/>	Remove identified barriers to access. These can include deceptive design patterns, accessibility issues, or other pain points.				
<input type="checkbox"/>	Assign all involved parties, including visitors, an equitable role in the decision-making process when undertaking research, identifying needs, or iterative design work.				
	<b>Impact &amp; Effort</b>	Medium		High	
	<b>GRI</b>	Medium	Medium	Medium	Medium
<b>2.3</b>	Understand the impact for non-users				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Establish a plan of action for non-users and other affected parties who might be indirectly impacted by choices made in e-commerce, this can include neighbors accepting parcels or traffic jams due to deliveries. Other examples include the local health impacts of infrastructure emissions, or supply chain pressure. Research non-user needs, understand how they might be affected, and consider ways negative effects could be mitigated.				
	<b>Impact &amp; Effort</b>	Medium		Medium	
	<b>GRI</b>	Medium	Medium	Medium	Medium
<b>2.4</b>	Integrate sustainability into every stage of the ideation process				
	<b>Success Criterion</b>				

<input type="checkbox"/>	Optimize all branding materials and assets approved during the ideation process in line with sustainability best practices prior to deployment. This also applies to brand refreshes, rebranding, and later enhancements. Make publicly available branding guidelines detailing the sustainability impact and best-practice deployment of materials and assets.			
<input type="checkbox"/>	Use wireframes and rapid prototyping to quickly build consensus, reduce risk, and reduce the number of resources needed to build features. Evaluate the impact of all tools used.			
<input type="checkbox"/>	Use the participatory design approach to involve users within the iteration and design process. When conducting user testing, reach out to your community to help improve your product. Provide opportunities for users to apply their knowledge and experience to your product or service.			
	<b>Impact &amp; Effort</b>	Low		Low
	<b>GRI</b>	Low	Low	Low
<b>2.5</b>	Find ways to resolve any affected party issues prior to implementation			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Use a human-centered approach during ideation to consider the needs, interests, and impact on directly and indirectly affected parties.			
<input type="checkbox"/>	Consider planetary needs and environmental boundaries during the ideation phase. This can include creating non-user, non-human (animal, planet) personas, or climate-specific user stories and sprints.			
	<b>Impact &amp; Effort</b>	Medium		Medium
	<b>GRI</b>	Medium	Medium	Medium
<b>2.6</b>	Minimize non-essential content, interactivity, or journeys			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Make access as simple and efficient as possible. Displaying the time required to complete an action, reduction of choice, and ensuring visitors understand requirements at the start of a journey can improve user efficiency.			
<input type="checkbox"/>	Ensure user journeys are as smooth as possible. It also helps to build on established design patterns that people already understand.			
<input type="checkbox"/>	Enable visitors to complete tasks without distractions or non-essential features getting in the way.			
<input type="checkbox"/>	Only show visitors information that is relevant to their experience, hiding non-essential information from view.			
<input type="checkbox"/>	Ensure that disruptive actionable information, such as pop-up or modal windows, can only be initiated by the visitor.			
	<b>Impact &amp; Effort</b>	Medium		Medium
	<b>GRI</b>	Medium	Medium	Medium
<b>2.7</b>	Use decorative design with care			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Use decorative design only when it enhances user experience. Remove unnecessary assets or those that do not enhance user experience or sustainability. Alternatively, make these optional and disabled by default.			
	<b>Impact &amp; Effort</b>	High		Medium

	<b>GRI</b>	High	High	High	High
<b>2.8</b>	Ensure that navigation and wayfinding are well-structured				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Provide an accessible, easy-to-use navigation menu with search features to help visitors easily find what they need.				
<input type="checkbox"/>	Consider implementing an efficient and regularly updated sitemap for human visitors. While guidance beyond the nav bar may be unnecessary for smaller projects, clearly structured human-readable sitemaps can improve accessibility and help users find their way through websites or other online content with naturally complex or legacy information architecture.				
<input type="checkbox"/>	Implement lightweight and efficient means for visitors to learn about new content and services.				
	<b>Impact &amp; Effort</b>	Low		Low	
	<b>GRI</b>	Medium	Low	Medium	Low
<b>2.9</b>	Design to assist and not to distract				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Ensure users can easily control how and when they receive information, with respect for their attention, focus, and mental energy.				
<input type="checkbox"/>	Prioritize features that assist rather than distract visitors, not unnecessarily prolonging the time they spend engaging with your content.				
<input type="checkbox"/>	Avoid using design strategies intended to artificially prolong user attention, such as infinite scroll.				
	<b>Impact &amp; Effort</b>	Medium		Low	
	<b>GRI</b>	Medium	Medium	Medium	Medium
<b>2.10</b>	Use established design patterns and appropriate components				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Display only essential components at the time they are needed. Where appropriate, use familiar patterns to maximize ease of use.				
	<b>Impact &amp; Effort</b>	Medium		Low	
	<b>GRI</b>	Medium	Low	Medium	Low
<b>2.11</b>	Avoid being manipulative or deceptive				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Avoid deceptive design or unethical coding techniques that manipulate visitors into taking actions that are not in their best interest. Examples include anti-right click, copy prevention, requiring an account to purchase, etc.				
<input type="checkbox"/>	Select, present, and label advertisements and sponsorships transparently and only implement where these provide economic and ethical value without diminishing user experience.				
<input type="checkbox"/>	Evaluate and remove unnecessary or unused analytics and tracking, including any operating without user consent.				

<input type="checkbox"/>	Focus on serving user intent through non-manipulative search and social media optimization. For example, do not misuse coding practices intended to support assistive technologies. This can include content with natural redundancy, or unhelpful or low-quality material designed only to manipulate search results.			
	<b>Impact &amp; Effort</b>	High		Medium
	<b>GRI</b>	Low	Low	Low
<b>2.12</b>	Make deliverables understandable and reusable			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Create deliverables, including documentation, in ways that facilitate later reuse.			
<input type="checkbox"/>	Document functionality and technical specifications so that they can be understood by everyone that needs to use them.			
<input type="checkbox"/>	Developers have access to code comments and have the ability to view source to make it easier to access, understand, maintain, and use code.			
	<b>Impact &amp; Effort</b>	Medium		High
	<b>GRI</b>	Medium	Medium	Medium
<b>2.13</b>	Use a design system for interface consistency			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Use a design system based on web standards and established patterns to share interface components and ensure a consistent user experience.			
	<b>Impact &amp; Effort</b>	Low		Medium
	<b>GRI</b>	Medium	Low	Low
<b>2.14</b>	Provide clear, inclusive content with purpose			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Write content using plain and inclusive language, at an appropriate reading level for your audience. Account for specific needs in relation to accessibility, native language, and internationalization.			
<input type="checkbox"/>	Use appropriate formatting for digital media. Provide a clear document structure with consideration of visual hierarchy. Use headings, bulleted lists, line spacing, and highlights appropriately. Provide information with appropriate formatting for the action users need to take.			
<input type="checkbox"/>	Prioritize SEO from the early design stages and throughout the lifecycle to ensure content can be found and used.			
	<b>Impact &amp; Effort</b>	Low		Low
	<b>GRI</b>	Medium	Low	Low
<b>2.15</b>	Optimize images for sustainability			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Determine the need for images with consideration of the quantity, format, and sizes required.			
<input type="checkbox"/>	Resize, optimize, and compress each image. Provide images in appropriate sizes for different screen resolutions.			
<input type="checkbox"/>	Include lazy loading to ensure images only load when they are required.			

<input type="checkbox"/>	Provide the option for images to be disabled or provide a low-fidelity alternative.				
<input type="checkbox"/>	Set up a media management and use policy to reduce the overall impact of images. Include criteria for media compression and file formats.				
	Impact & Effort	High		Low	
	GRI	High	High	High	High
2.16	Optimize media for sustainability				
	Success Criterion				
<input type="checkbox"/>	Do not include any video or audio unless it provides positive value. Disable auto-play functionality on audio and video.				
<input type="checkbox"/>	Optimize and compress media appropriately. Provide media in compatible and appropriate formats. Avoid non-native embedded media players.				
<input type="checkbox"/>	Load data-intensive media on the client side, including the media itself, behind a facade - a non-functional and static representational element.				
<input type="checkbox"/>	Let the visitor control media, including a choice of resolutions and formats and the option to deactivate media. Inform users the length, format, and data intensity of the media.				
<input type="checkbox"/>	Establish media management and use policy to evaluate and reduce the overall impact of media, such as audio, video, or emerging media formats. Include criteria for media compression and file formats.				
	Impact & Effort	High		Medium	
	GRI	High	High	High	High
2.17	Ensure animation is proportionate and easy to control				
	Success Criterion				
<input type="checkbox"/>	Use animation only when it adds value and not for decorative elements.				
<input type="checkbox"/>	Progressively display an appropriate number of animations to avoid overburdening the visitor or negatively impacting device performance. This includes setting a maximum number of replays or iterations.				
<input type="checkbox"/>	Allow visitors to start, stop, pause, or otherwise control animated content.				
	Impact & Effort	Medium		Low	
	GRI	High	High	High	High
2.18	Use optimized and appropriate web typography				
	Success Criterion				
<input type="checkbox"/>	Use pre-installed, web-safe typefaces wherever possible.				
<input type="checkbox"/>	Limit the number of fonts used. Design or subset fonts to omit unnecessary or unused variations, such as font weight or characters. Use the most performant file format available.				
	Impact & Effort	Medium		Low	
	GRI	Medium	Medium	Medium	Medium
2.19	Offer suitable alternatives for every format used				

	<b>Success Criterion</b>			
<input type="checkbox"/>	Provide open alternatives, such as HTML, to proprietary file formats, such as PDF.			
<input type="checkbox"/>	Provide a suitable font stack as a fallback when custom typefaces are used.			
<input type="checkbox"/>	Provide meaningful alternative text for all descriptive images that are non-decorative and support the user's understanding of the content.			
<input type="checkbox"/>	Include transcripts and/or text versions of media files as an alternative to playing the media.			
<input type="checkbox"/>	Include WebVTT closed captions and subtitles support for videos. Provide localization as expected by your audience, including subtitles and sign language that meet the same standard.			
	<b>Impact &amp; Effort</b>	Medium		Medium
	<b>GRI</b>	Medium	Medium	Medium
<b>2.20</b>	Provide accessible, user-friendly, minimal web forms			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Remove unnecessary forms and reduce form content to the minimum necessary to meet the user needs while satisfying the organization's minimum requirements. Clearly communicate why a form is necessary, the value it provides, the number of steps required for completion, and what will be done with the collected data. Also disclose if the data will be shared with third parties.			
<input type="checkbox"/>	Avoid using auto-completion or auto-suggest based on partial entry to conserve user bandwidth and reduce unnecessary server side requests. Support the use of helpful tooling, such as password managers, by not preventing autofill.			
	<b>Impact &amp; Effort</b>	Low		Low
	<b>GRI</b>	Medium	Low	Medium
<b>2.21</b>	Consider the experience in non-visual browsers and interfaces			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Support non-visual browsing methods and various non-graphical ways to interact with content. This includes anything from assistive technologies to voice agents. Consider and provide working alternatives to visual interfaces.			
	<b>Impact &amp; Effort</b>	Low		Medium
	<b>GRI</b>	Medium	Low	Medium
<b>2.22</b>	Provide useful notifications			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Remove non-essential notifications. Justify and reduce email, text message (SMS), and other invasive or energy-intensive notifications to what is strictly necessary. Useful notifications, such as alerts for new content should be used with care and restraint.			
<input type="checkbox"/>	Let the user adjust their own notification and messaging settings. Ensure the options to unsubscribe, log out, and close an account should be available and visible. Ensure it is possible for the user to change their contact details.			
<input type="checkbox"/>	Clearly explain the result of a potential input through helpful prompts and messages that explain errors, next steps, and other relevant information. This will help to manage users' expectations.			
	<b>Impact &amp; Effort</b>	Low		Low

	<b>GRI</b>	Medium	Low	Medium	Low
<b>2.23</b>	Reduce the impact of downloadable and physical documents				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Design your process to reduce the need for paper documents. Where the production of paper documents is essential, it should be designed to have the lowest impact possible. Include a CSS print stylesheet and test it with different types of content. Encourage saving documents in digital formats over paper-based storage and archiving.				
<input type="checkbox"/>	Optimize and compress all downloadable documents. Make them available in a variety of accessible file formats.				
<input type="checkbox"/>	Avoid duplicating effort. If a document will be reused, generate and save it once on the server side for reuse, ideally on a cookie-free domain.				
<input type="checkbox"/>	Display the document name, a summary, the file size, and the format prior to downloading. Allow users to choose the right format and language for their needs where possible. Avoid embedding documents directly; provide a link to download or view them within the browser instead.				
	<b>Impact &amp; Effort</b>	Medium		Low	
	<b>GRI</b>	Medium	Low	Medium	Low
<b>2.24</b>	Get users and contributors invested in the project				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Outline processes used to prototype and test new features, product ideas, and user interface components. Test with real users who represent different perspectives and user constraints.				
<input type="checkbox"/>	Ensure prototyping and testing processes are sufficiently resourced to support long-term viability and avoid project abandonment.				
<input type="checkbox"/>	Produce or provide, training materials to properly educate and onboard new contributors.				
<input type="checkbox"/>	Conduct regular and extensive testing alongside user interviews to validate whether released features meet internal goals and audience needs.				
	<b>Impact &amp; Effort</b>	High		Medium	
	<b>GRI</b>	High	High	High	High
<b>2.25</b>	Audit and test for bugs or issues requiring resolution				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Check the codebase for bugs, identify performance issues, and account for accessibility or security problems at appropriate regular intervals, such as every month or quarter.				
<input type="checkbox"/>	Implement non-regression tests for all critical features.				
<input type="checkbox"/>	Incorporate regression testing into each release cycle to ensure new features do not introduce bugs or otherwise conflict with existing functionality.				
	<b>Impact &amp; Effort</b>	Medium		Medium	
	<b>GRI</b>	Medium	Medium	Medium	Medium
<b>2.26</b>	Measure and test for performance				
	<b>Success Criterion</b>				

<input type="checkbox"/>	Identify and resolve bottlenecks or issues in the underlying code or infrastructure which could impact sustainability and performance. Consider both simulated and real-world metrics. Monitor performance across every release cycle using appropriate tooling or through research and auditing.			
<input type="checkbox"/>	Collect only data required to provide a streamlined and effective user journey and comply with relevant accessibility and data protection legislation. Put policies in place to ensure strict adherence.			
	<b>Impact &amp; Effort</b>	Medium		Low
	<b>GRI</b>	Medium	Medium	Medium
<b>2.27</b>	Evaluate feature use, value, and impact			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Monitor visitor feedback, adoption, and churn rates in relation to different features and incorporate these insights into future releases.			
	<b>Impact &amp; Effort</b>	Medium		Low
	<b>GRI</b>	Medium	Medium	Medium
<b>2.28</b>	Verify that real-world users can successfully use your work			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Incorporate usability testing into product cycles and routinely measure the impact of these tests for future releases.			
	<b>Impact &amp; Effort</b>	Medium		Medium
	<b>GRI</b>	Medium	Medium	Medium
<b>2.29</b>	Regularly test and maintain compatibility			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Establish and maintain a compatibility policy which covers current and obsolete devices and software versions, listing the supported device brands, operating systems, and browsers (including versions). Update this regularly in line with new releases.			
<input type="checkbox"/>	Avoid planned obsolescence. Strive to maintain compatibility for as long as possible and communicate clearly whether an update is evolutionary, as in large updates that can significantly reduce performance, or corrective, as in smaller updates that fix bugs or improve security.			
<input type="checkbox"/>	Test performance in various scenarios to ensure compatibility. Testing should cover weak, unstable, restricted, or slow connections, old browsers, and devices older than five years.			
<input type="checkbox"/>	Use device-adaptable methods such as responsive design and prototype interfaces to support progressive enhancement and content prioritization.			
<input type="checkbox"/>	Use a PWA over a native mobile application if it meets sustainability, interoperability, and compatibility criteria.			
	<b>Impact &amp; Effort</b>	High		Medium
	<b>GRI</b>	High	High	High
<b>3.1</b>	Set goals based on performance and energy impact			
	<b>Success Criterion</b>			



<input type="checkbox"/>	Set clear goals with performance and environmental impact in mind, then meet them. These could include, the number of requests or elements that must be rendered.			
<input type="checkbox"/>	Consider differences in the energy intensity or testable impact across each component. For example, unstyled text is less computationally intensive to render than CSS, which in turn is less process-heavy than JavaScript, which is less resource-heavy than WebGL or 4K video.			
	<b>Impact &amp; Effort</b>	Medium		Medium
	<b>GRI</b>	Medium	Medium	Medium
<b>3.2</b>	Remove unnecessary or redundant information			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Remove unnecessary whitespace, comments, and other non-essential characters from code and data files to reduce file sizes and improve loading times. This applies to HTML, CSS, JavaScript, JSON, SVG, and other relevant file types.			
	<b>Impact &amp; Effort</b>	Low		Low
	<b>GRI</b>	Low	Low	Low
<b>3.3</b>	Modularize bandwidth-heavy components			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Break down bandwidth-heavy components into smaller, modular segments that can be loaded only when required. This applies to both front-end and back-end code.			
	<b>Impact &amp; Effort</b>	Medium		Low
	<b>GRI</b>	Medium	Medium	Medium
<b>3.4</b>	Remove unnecessary code			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Identify and eliminate unused and dead code, commonly within CSS and JavaScript.			
	<b>Impact &amp; Effort</b>	Medium		Medium
	<b>GRI</b>	Medium	Medium	Medium
<b>3.5</b>	Avoid redundancy and duplication in code			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Remove duplication and/or simplify and optimize your code for better performance, focusing on essential features so you have a cleaner, less redundant product and codebase.			
<input type="checkbox"/>	Improve existing solutions rather than redeveloping and redesigning products from scratch, since the latter would duplicate the coding effort and maintenance burden for developers rather than reduce the learning burden for visitors.			
<input type="checkbox"/>	Use organization methodology and systems such as DRY or WET to optimize the arrangement and output of your JavaScript and CSS.			
	<b>Impact &amp; Effort</b>	Medium		Medium
	<b>GRI</b>	Medium	Medium	Medium
<b>3.6</b>	Give third parties the same priority as first parties during assessment			

	<b>Success Criterion</b>			
<input type="checkbox"/>	Assess third-party content and/or services (including plugins, widgets, feeds, maps, carousels, tracking scripts, and more) as early as possible in the ideation or creation process. Use as few as possible, preferring lighter, less complex solutions to reduce the overall environmental impact, including Scope 3 emissions.			
<input type="checkbox"/>	Use click-to-load triggers based on an import on interaction pattern to prevent automatic loading of third-party content and/or services (see above). Offer suitable alternatives to third-party use, for example, a link to a contact form as an alternative to a chat widget.			
<input type="checkbox"/>	Avoid using large libraries and frameworks. Integrate these only when unable to use a more performant alternative to achieve the same goal.			
<input type="checkbox"/>	Prioritize self-hosted content over embedding content from third-party services.			
<input type="checkbox"/>	Host icons and widgets on your own server, rather than relying on third-party services to host and deliver these or embed third-party functionality within your project.			
<input type="checkbox"/>	Respect user preferences around the use of third-party products and services, similar to the implementation of cookie consent modals. Provide mechanisms to disable or refuse non-first-party features alongside explanations of their purpose unless it is possible to show these third-party features are critical for functionality.			
	<b>Impact &amp; Effort</b>	High		Medium
	<b>GRI</b>	High	High	High
<b>3.7</b>	Ensure code follows good semantic practices			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Use accurate markup according to the relevant standard(s).			
<input type="checkbox"/>	Remove optional HTML elements, attribute quotes, and default attributes only when they do not negatively impact functionality, accessibility, or readability. Retain them when they enhance accessibility, maintain clarity without compromising on performance, or ensure consistent browser rendering.			
<input type="checkbox"/>	Avoid using non-standard HTML elements or attributes.			
<input type="checkbox"/>	Prioritize the use of standard HTML elements and attributes. Only use custom elements or Web Components if you cannot use native elements or if you require them for the purposes of producing reusable design system components.			
	<b>Impact &amp; Effort</b>	Medium		Medium
	<b>GRI</b>	Medium	Medium	Medium
<b>3.8</b>	Defer the loading of non-critical resources			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Defer loading of non-essential external assets or set these to load asynchronously to avoid a Flash Of Unstyled Content (FOUC).			
<input type="checkbox"/>	Where external resources are required to be used upon the documents load, optimize loading using resource and priority hints.			
	<b>Impact &amp; Effort</b>	Medium		Low
	<b>GRI</b>	Medium	Medium	Medium
<b>3.9</b>	Provide information to help understand the usefulness of a page			

	<b>Success Criterion</b>			
<input type="checkbox"/>	Optimize and only include suitable metadata and microdata.			
<input type="checkbox"/>	Permit appropriate access to search engines while blocking unsustainable robots and scripts.			
<input type="checkbox"/>	Provide accessibility and usability aids, such as skip links and signposts, to help users find and navigate content.			
	<b>Impact &amp; Effort</b>	Low		Low
	<b>GRI</b>	Low	Low	Low
<b>3.10</b>	Validate form errors and account for tooling requirements			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Identify errors through live validation and with feedback on submission.			
<input type="checkbox"/>	Clearly label and identify required elements to ensure easy recognition for visitors using assistive technologies. Remove any unnecessary optional elements.			
<input type="checkbox"/>	Always allow the copying and pasting of content (including passwords) from external sources.			
	<b>Impact &amp; Effort</b>	Medium		Low
	<b>GRI</b>	Medium	Medium	Medium
<b>3.11</b>	Structure metadata for machine readability			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Include the required title element, plus any beneficial optional HTML head elements.			
<input type="checkbox"/>	Include necessary meta tag references that are commonly recognized and used by user agents such as search engines. Follow recognized standards and vocabularies such as Friend of a Friend (FOAF) or RDFa.			
<input type="checkbox"/>	Use microdata, structured data (e.g., <a href="https://schema.org">Schema.org</a> ), or microformats in content where a widely used structured data format exists.			
	<b>Impact &amp; Effort</b>	Medium		Low
	<b>GRI</b>	Medium	Medium	Medium
<b>3.12</b>	Use sustainability beneficial user preference media queries			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Accommodate common user preferences, such as prefers-color-scheme, with corresponding CSS media queries. Consider accounting for additional user preferences, including monochrome, prefers-contrast, prefers-reduced-data, prefers-reduced-transparency, and prefers-reduced-motion preference queries where these will benefit your users. Use print and scripting media queries when they can improve sustainability.			
	<b>Impact &amp; Effort</b>	Medium		Low
	<b>GRI</b>	Medium	Medium	Medium
<b>3.13</b>	Ensure layouts work for different devices and requirements			
	<b>Success Criterion</b>			

<input type="checkbox"/>	Allow your project to work and adapt seamlessly across a variety of devices and screen sizes, including smartphones, tablets, laptops, desktop computers, smart TVs, and other emerging platforms. This ensures that content and functionality can be easily accessed and are suitably optimized for display on both smaller mobile devices and larger displays without limiting accessibility, usability, or design features on any specific device type. Implement robust fallback strategies to ensure that the digital product or service will not fail if it encounters unsupported technologies.				
<input type="checkbox"/>	Use progressive enhancement to enhance overall sustainability. This can involve a single approach or a careful combination, such as adaptive design, mobile-first design, or dynamic serving.				
<input type="checkbox"/>	Use carbon-aware design techniques to maximize your use of carbon-free energy. This is achieved by adapting the delivery of your project to current electricity availability and visitor grid load. This should include using situational design to reduce the codebase and disable non-essential functionality during high-intensity periods. Similarly, it should be possible to adapt the user interface to perform better with reduced hardware resources, where this measure can be taken to avoid scaling hardware resources and the resultant increase in emissions. It can also include designing algorithms that can automatically disable features based on set thresholds.				
<input type="checkbox"/>	Support additional indirect methods of interaction, such as voice (speech), code (QR, etc.), reader view (browser, application, or RSS), or connected technologies (watch, appliance, transport, etc.).				
	Impact & Effort	Medium		Low	
	GRI	Medium	Low	Medium	Low
3.14	Use Standards-based JavaScript and APIs				
	Success Criterion				
<input type="checkbox"/>	Improve sustainability through accessible and performant code.				
<input type="checkbox"/>	Integrate energy-relevant APIs - such as Battery Status, Compression Streams, Page Visibility, or Vibration - where these can reduce energy consumption.				
<input type="checkbox"/>	Call client- or server-side APIs only when necessary. Equally, ensure an API is optimized to only send data that is actually required.				
	Impact & Effort	High		Medium	
	GRI	High	High	High	High
3.15	Ensure that your code is secure				
	Success Criterion				
<input type="checkbox"/>	Check scripts and associated code for vulnerabilities, exploits, header issues, and code injection.				
	Impact & Effort	Medium		Medium	
	GRI	Medium	Medium	Medium	Medium
3.16	Use dependencies appropriately and ensure maintenance				
	Success Criterion				
<input type="checkbox"/>	Prevent developers from downloading and installing libraries and frameworks to run client-side when they are not needed by checking for unused dependencies. Follow up by uninstalling those that are not needed.				

<input type="checkbox"/>	Limit your use of libraries and frameworks to the genuinely necessary as this will reduce the amount of code that has to be downloaded and parsed by the browser. Consider whether you can use vanilla code instead. Check the package size and whether individual modules can be installed and imported individually, as opposed to the entire library.			
<input type="checkbox"/>	Regularly check dependencies and keep them up to date.			
	<b>Impact &amp; Effort</b>	Medium		Low
	<b>GRI</b>	Low	Low	Low
<b>3.17</b>	Include expected and beneficial files			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Include favicon.ico, robots.txt, opensearch.xml, site.webmanifest, and sitemap.xml files by default. Also ensure that any similar files defined in future web standards or specifications are included.			
<input type="checkbox"/>	Include beneficial files such as ads.txt, carbon.txt, humans.txt, security.txt. Also ensure that any similar files defined in future web standards or specifications are included.			
	<b>Impact &amp; Effort</b>	Low		Low
	<b>GRI</b>	Low	Low	Low
<b>3.18</b>	Avoid using deprecated, proprietary, or outdated code			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Avoid using deprecated, proprietary, or outdated formats and web standards. Always adopt up-to-date, widely recognized standards. Only use deprecated, proprietary, or outdated code where this is required to meet a documented customer need and if there is a justifiable benefit that cannot otherwise be met. Justifiable reasons could include compatibility with essential legacy systems and/or hardware, accessibility, or emissions reduction. Use polyfills only when necessary, and regularly audit code to see if they can be removed.			
	<b>Impact &amp; Effort</b>	Low		Medium
	<b>GRI</b>	Low	Low	Low
<b>3.19</b>	Use the most efficient solution for your service			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Identify the requirements and use this as a basis to help you select the most appropriate implementation for your project. A simpler technological implementation may use more human resources but could have a smaller footprint. A prebuilt solution may use more system resources and have a bigger emissions impact on render, but it could have a faster build time - meaning less carbon is emitted in development.			
<input type="checkbox"/>	Use the most effective approach for your use case. Most of the time, coding from scratch will often provide the most performant results. Where an existing solution is present and is being actively maintained, this may be better optimized than what you can reasonably produce yourself. Favor native components and file systems over WYSIWYG editors - including visual page builders - or other heavy frameworks. Be mindful of the impact of third-party solutions.			
<input type="checkbox"/>	Deliver static in place of dynamic content wherever possible. If you choose to use a code generation tool, then favor the most efficient tool available, such as Static Site Generators (SSGs). Content delivered by a dynamic CMS will involve much more server-side processing and uses bulkier libraries.			
<input type="checkbox"/>	Carefully select and review plugins, extensions, and themes to maximize interoperability, accessibility, and performance. Audit these regularly over time to ensure continued compatibility.			

<input type="checkbox"/>	Pay particular attention to user interface components with respect to their sustainability impact.				
	<b>Impact &amp; Effort</b>	Medium		Medium	
	<b>GRI</b>	Medium	Medium	Medium	Medium
<b>3.20</b>	Use the latest stable language version				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Use the latest build of your chosen syntax language and its coupled framework.				
<input type="checkbox"/>	Use the most appropriate programming language for the task. Many tools and programming languages are optimized for the performance of particular tasks. Applying the most appropriate tools to the problem can justify any time or effort involved in their adoption, especially if there is a reasonable user base, provided it does not impact the wellbeing of those involved or risk becoming cost-prohibitive.				
	<b>Impact &amp; Effort</b>	Medium		Medium	
	<b>GRI</b>	Medium	Medium	Medium	Medium
<b>3.21</b>	Take advantage of native features and functionality				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Use native functions, APIs, and features over writing your own.				
	<b>Impact &amp; Effort</b>	Medium		Low	
	<b>GRI</b>	Medium	Medium	Medium	Medium
<b>3.22</b>	Reduce the number and complexity of database queries				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Optimize database queries, especially for frequently accessed information. If you need information that is stored in a database, and you require it or it is likely to be requested more than once in your code, the database should only be accessed once and the data stored locally for subsequent processing. Avoid relying on framework helpers that might defer filtering to later in the process.				
	<b>Impact &amp; Effort</b>	Medium		Low	
	<b>GRI</b>	Low	Low	Low	Low
<b>4.1</b>	Choose a sustainable service provider				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Monitor key indicators to assess and transparently report the environmental impact of hosting and identify overconsumption. These include energy and water usage, but also hardware factors, such as CPU usage and memory usage. Similarly, track the allocation of servers and CPU cores to optimize resource efficiency. Consumers should monitor and providers should both calculate and transparently share, environmental impact metrics. Metrics should include Power Usage Effectiveness (PUE), Water Usage Effectiveness (WUE), and Carbon Usage Effectiveness (CUE).				
<input type="checkbox"/>	Maintain hardware to extend its lifespan as long as possible. Use it efficiently at an appropriate capacity, and ensuring it has the necessary certifications. New purchases should be from reliable long-lifespan suppliers.				
<input type="checkbox"/>	Responsibly recycle or upcycle unwanted waste. Materials should be recovered and reused, where possible, or otherwise disposed of appropriately.				

<input type="checkbox"/>	Use electricity with the lowest possible carbon intensity. Examine location-based emissions factors to calculate the carbon intensity of available electricity from the regional grid. Include the impact of on-site electricity generation, including backup generators, in calculations.				
<input type="checkbox"/>	Balance unavoidable remaining carbon emissions with high-quality market based instruments or other evolving instruments from the voluntary carbon market, until additional carbon-free energy resources become available. The quality of market-based instruments should be verified by non-profit third-party organizations with sufficient supporting evidence.				
<input type="checkbox"/>	The impact of domain names is disclosed by registries and registrars, and registrants consider and (where possible) mitigate against these environmental issues.				
	Impact & Effort	High		Medium	
	GRI	Low	Low	Low	Low
4.2	Optimize caching with offline access supported				
	Success Criterion				
<input type="checkbox"/>	Use server-side caching where possible to reduce processing time and repeated database lookups or API calls. Configure caching via server settings to control file-type expiration using appropriate headers, such as Expires or Cache-Control. Cache dynamic page responses where possible to serve static versions to future users. Support client-side caching of frequently used static assets to minimize repeat server requests.				
<input type="checkbox"/>	Ensure resources remain available and accessible even if the user is disconnected, using methods such as JavaScript Service Workers, Web Workers, and browser local storage features.				
	Impact & Effort	High		High	
	GRI	Medium	High	Medium	High
4.3	Compress files where it is beneficial				
	Success Criterion				
<input type="checkbox"/>	Use server-side compression to reduce file sizes before delivery. Server-side compression settings and tools can be used to compress most commonly used file types, reducing energy consumption while minimizing load times, saving bandwidth, and improving overall performance.				
<input type="checkbox"/>	Use media compression tools to reduce the file size of images, videos, audio, and any other media before uploading to a server.				
	Impact & Effort	High		Low	
	GRI	Low	Low	Low	Low
4.4	Setup necessary error pages and redirection links				
	Success Criterion				
<input type="checkbox"/>	Set up proper error handling and error pages to clearly inform users when something goes wrong, guide them back to useful content, and maintain a consistent, trustworthy experience.				
<input type="checkbox"/>	Regularly audit to check for broken and outdated links. Update these as necessary and add redirects to guide users and search engines to the correct content to ensure efficient browsing and protect SEO value. Test all redirects to ensure they function as intended and avoid impactful redirect loops. Favor the most efficient redirection system for your setup (e.g., server rules over database lookups).				
	Impact & Effort	Low		Low	
	GRI	Low	Low	Low	Low

4.5	Avoid maintaining unnecessary virtualized environments or containers				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Minimize the number of active environments, including virtualized environments (such as containers). Audit codebases for unused branches and environments and remove them as appropriate.				
	<b>Impact &amp; Effort</b>	Medium		Low	
	<b>GRI</b>	Low	Low	Low	Low
4.6	Use automation wisely				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Automate recurring tasks, such as deployment, testing, and compilation in alignment with continuous integration and continuous delivery best practices.				
<input type="checkbox"/>	Run automated tasks only when necessary to reduce unnecessary resource utilisation.				
<input type="checkbox"/>	Use automated scaling to promptly adjust server capacity up or down based on demand, ensuring efficient resource allocation. Implement buffering and throttling to manage load and maintain performance without overprovisioning.				
<input type="checkbox"/>	Restrict the activity of unwanted and unnecessary third-party crawlers, suspicious user agents, unwanted visitors, bots, and scrapers from accessing or downloading your content. Follow best practices, such as server access rules and security tools, while ensuring your content remains accessible to users, search engines and any helpful, welcome crawlers. Consider that scrapers may be used to inform and train large language models.				
	<b>Impact &amp; Effort</b>	High		Medium	
	<b>GRI</b>	Low	Low	Low	Low
4.7	Define the frequency of data refreshes				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Define the revalidation and refresh frequency for the cache, local data, and page content based on user needs, balancing performance, data accuracy, and resource efficiency.				
	<b>Impact &amp; Effort</b>	Medium		Low	
	<b>GRI</b>	Medium	Medium	Medium	Medium
4.8	Back up critical data at routine intervals				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Ensure backups of system and user data are secure and incremental to minimize storage use, reduce backup time, and protect against data loss or breaches.				
	<b>Impact &amp; Effort</b>	Low		Low	
	<b>GRI</b>	Low	Low	Low	Low
4.9	Consider the impact and requirements of data processing				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Use existing and supported carbon-aware computing methods to automate batching and scheduling according to real-time electrical grid carbon intensity data or shift workloads to lower-carbon regions to optimize sustainability while maintaining performance.				



<input type="checkbox"/>	Choose communication protocols appropriate to visitor needs and the type of data being transferred. Avoid insecure options such as HTTP and FTP, and prioritize secure, efficient alternatives such as HTTPS and SSH. Use modern protocols to take advantage of newer features, while maintaining backward compatibility for older devices.				
<input type="checkbox"/>	Consider using event-driven architecture and microservices when building products with state changes that do not require full page refreshes. Favor these where they offer a more energy-efficient alternative to traditional APIs based on performance, power, and processing factors. Choose the approach that reduces server workload and environmental impact.				
<input type="checkbox"/>	Avoid redundant processing. When data processing is necessary, carefully compare the relative effects of client- versus server-side processing based on efficiency, performance, security, and sustainability metrics to make an informed decision.				
	Impact & Effort	Medium		Medium	
	GRI	Low	Low	Low	Low
4.10	Use Content Delivery Networks (CDNs) appropriately				
	Success Criterion				
<input type="checkbox"/>	Deploy static content, assets, and other read-only resources via a Content Delivery Network (CDN) on a case-by-case basis, where judged to be beneficial. Carefully evaluate the environmental impact of any CDN service used, similar to a web hosting provider.				
<input type="checkbox"/>	Select CDN providers that make commitments to sustainability and report on their progress.				
<input type="checkbox"/>	When serving an exclusively local audience, consider whether a CDN is required at all. Instead, select hosting providers with servers close to your target audience.				
<input type="checkbox"/>	Avoid deploying dynamic or frequently changing resources to a CDN. Browser behaviors such as cache partitioning and cross-origin resource sharing (CORS) can limit performance gains, hinder caching and interaction, and attempting to override these can introduce security or privacy risks. This does not apply to static assets or JSON files, which are well suited to CDN delivery.				
<input type="checkbox"/>	Perform data transformations, transfers, and processing between the layers of an application as close to the source as possible. This reduces unnecessary serialization overhead and avoids wasting resources.				
	Impact & Effort	Medium		Low	
	GRI	Low	Medium	Low	Medium
4.11	Infrastructure decisions must meet business requirements				
	Success Criterion				
<input type="checkbox"/>	Select infrastructure that meets your requirements and customer agreements without over-provisioning. Favor standalone instances over multi-zone or distributed setups when requirements allow. Provision for average loads rather than peaks to ensure efficient resource use. Use autoscaling to handle fluctuations without underutilizing infrastructure.				
	Impact & Effort	Medium		Medium	
	GRI	Low	Low	Low	Low
4.12	Store data according to the needs of your users				
	Success Criterion				
<input type="checkbox"/>	Regularly audit for and delete redundant, abandoned, or single-use data - often referred to as dark data - to reduce storage demand and energy use.				

<input type="checkbox"/>	Assign expiration and/or maximum retention dates to stored data where appropriate, treating excess data as a form of technical debt. Simultaneously observe any applicable minimum data retention periods. Make data cleanup an established organization-wide routine to prevent long-term data accumulation.				
<input type="checkbox"/>	Implement a data classification and tagging policy to improve visibility, simplify management, and enable efficient removal of outdated or unused data.				
<input type="checkbox"/>	Store data only when it cannot be easily or accurately regenerated.				
<input type="checkbox"/>	Optimize log collection and storage by scheduling backups during low-activity hours, rotating logs appropriately, and using off-site, sustainable providers.				
<input type="checkbox"/>	Make large, long-term assets available for easy download in order to provide users with regular offline access without requiring persistent server resources.				
	Impact & Effort	Low		Low	
	GRI	Low	Low	Low	Low
5.1	Have an ethical and sustainable product strategy				
	Success Criterion				
<input type="checkbox"/>	Develop, publish and maintain key policies, such as a code of ethics, product guidelines, sustainability statements, and/or other documents that include language specific to digital products, services, policies, and programs. Make these publicly accessible and transparently versioned formats.				
<input type="checkbox"/>	Publish achievements, features, compliance, and anything beyond the scope of these guidelines within a dedicated sustainability section.				
<input type="checkbox"/>	Provide evidence to demonstrate how digital sustainability policies, climate policies, and related practices are effectively implemented, monitored, and governed over time.				
<input type="checkbox"/>	Provide training decks and workshops to support onboarding new team members in relation to sustainable product strategies.				
<input type="checkbox"/>	Document your methodology through impact storytelling, documentation, and creating resources to help individuals make more informed decisions and raise awareness among your visitors.				
<input type="checkbox"/>	Demonstrate how digital products and services are powered using carbon-free energy.				
	Impact & Effort	High		High	
	GRI	High	High	High	High
5.2	Assign a sustainability advocate				
	Success Criterion				
<input type="checkbox"/>	Assign a sustainability advocate with specific digital expertise and provide them with the resources, budget, tools, and time they need to achieve their stated goals. In some organizations, expanding this into a climate working group comprising motivated individuals can add further benefits.				
	Impact & Effort	Medium		Low	
	GRI	Medium	Medium	Medium	Medium
5.3	Inform, raise awareness, and train for sustainability				
	Success Criterion				

<input type="checkbox"/>	Inform and deliver training to all affected parties, including product teams, colleagues, and organizational decision-makers - both managers and clients - in both general and digital climate literacy, as well as your own sustainable technology policies.				
<input type="checkbox"/>	Provide active and routine training where possible to develop, establish, and refresh skills relating to sustainability. This can be delivered as in-house training, courses, workshops, events, webinars, meetups, or other ongoing or on-demand methods that support your team in achieving sustainability objectives.				
<input type="checkbox"/>	Encourage participants to reduce their environmental impact. Share climate and sustainable initiatives and ideas. Provide resources on sustainable design, best practices, and concepts to assist them.				
	Impact & Effort	Medium		Medium	
	GRI	Medium	Medium	Medium	Medium
5.4	Communicate the environmental impact of user choices				
	Success Criterion				
<input type="checkbox"/>	Clearly communicate the environmental impact of different visitor choices and allow visitors to configure settings based on the information provided.				
	Impact & Effort	Medium		Medium	
	GRI	Medium	Medium	Medium	Medium
5.5	Estimate the environmental impact				
	Success Criterion				
<input type="checkbox"/>	Conduct a full life-cycle analysis based on the functional unit defined under guideline 5.15.				
<input type="checkbox"/>	Calculate the environmental impact of your or a competitor's current service to inform decision-making targets.				
<input type="checkbox"/>	Include the impact or estimated impact of any tooling or third-party solutions used at any stage in your pipeline. While not created by you, the emissions generated in production, maintenance, and use are also integral to your overall solution.				
	Impact & Effort	Medium		Medium	
	GRI	Medium	Medium	Medium	Medium
5.6	Define clear organizational sustainability goals and metrics				
	Success Criterion				
<input type="checkbox"/>	Define and publish a clear set of sustainability goals. Publicly communicate how these goals can be met, including which performance metrics can be measured to help the organization and its various affected parties act more sustainably.				
	Impact & Effort	Low		Medium	
	GRI	Low	Low	Low	Low
5.7	Validate efforts using established third-party certifications				
	Success Criterion				
<input type="checkbox"/>	Obtain one or more sustainability certifications and incorporate operational policies and practices in alignment with their guidance.				

<input type="checkbox"/>	Maintains sustainability certifications through continuing to meet their criteria and evolving policies and practices over time.				
	<b>Impact &amp; Effort</b>	Medium		Medium	
	<b>GRI</b>	Medium	Medium	Medium	Medium
<b>5.8</b>	Implement sustainability onboarding guidelines				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Create and/or deliver dedicated training manuals, workshops, and materials to outline the sustainability policies and practices adopted and how to implement them. Manage and maintain these materials over time, adapting them as new policies and best practices arise.				
<input type="checkbox"/>	Incentivize leadership, teams, and individuals to make progress toward the goals outlined in their training. Examples include dedicating time for sustainability-related activities, recognizing completion, and other benefits.				
<input type="checkbox"/>	Anticipate and map potential negative external variables and act to minimize their overall impact.				
	<b>Impact &amp; Effort</b>	High		Medium	
	<b>GRI</b>	High	High	High	High
<b>5.9</b>	Support mandatory disclosures and reporting				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Create and publish policies and practices to disclose the social and environmental impacts of its products, programs, and services in line with existing reporting standards such as GRI, SASB, etc.				
<input type="checkbox"/>	Produce a publicly available impact report outlining progress compared to previous reports on social and environmental goals at least once per year.				
<input type="checkbox"/>	Publicly and transparently demonstrate commitment over time to following and adopting existing and/or emerging environmental standards and legislative policy that promotes mandatory emissions disclosures and reporting.				
<input type="checkbox"/>	Clearly identify how environmental impact is being reduced, with careful avoidance of double accounting, greenwashing, data exclusion, or other misleading or manipulative techniques.				
	<b>Impact &amp; Effort</b>	Medium		Medium	
	<b>GRI</b>	Medium	Medium	Medium	Medium
<b>5.10</b>	Create one or more impact business models				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Complete and operationalize a theory of change process with requisite documentation to identify the impact the organization aspires to achieve, how it will generate revenue, how it will create shared or added value from these activities, and how it will measure results based on desired outcomes. In the case of projects already underway, how these are generating revenue and actively tracking and measuring progress against desired outcomes.				
	<b>Impact &amp; Effort</b>	High		Medium	
	<b>GRI</b>	High	High	High	High
<b>5.11</b>	Follow a product management and maintenance Strategy				
	<b>Success Criterion</b>				

<input type="checkbox"/>	Produce and maintain documentation to outline how the organization approaches product management and maintenance.				
<input type="checkbox"/>	Establish maintenance and security plans for all digital products and services.				
<input type="checkbox"/>	Appropriately resource products over time via staffing and budgeting to support code refactoring, address technical debt, introduce new product features, test functionality, and produce product or service maintenance plans to continue supporting customers, visitors, and other affected parties.				
<input type="checkbox"/>	Incorporate carbon and resource measurement into maintenance programs and show measurable improvement over time.				
<input type="checkbox"/>	Identify and document Key Failure Indicators (KFIs) and implement resolutions to prevent negative sustainability impacts.				
	Impact & Effort	High		Low	
	GRI	High	High	High	High
5.12	Implement continuous improvement procedures				
	Success Criterion				
<input type="checkbox"/>	Establish policies and practices to enable continuous improvement and resource practices appropriately to support these efforts over time.				
<input type="checkbox"/>	Review deliverables and update frequency to ensure project teams have enough time to conduct user research, identify technical debt, and produce high-quality output as well as share what they learned.				
<input type="checkbox"/>	Display a track record of continuous improvement (iteration) processes to analyze the digital product or service. Simultaneously address any potential consequences of ongoing experimentation, such as technical debt, product performance, and emissions. Analytics are limited to strictly necessary features that aid decision-making, encouraging visitor feedback, and comparing performance against business goals and visitor needs.				
<input type="checkbox"/>	Justify and prioritize the retention of existing features, the creation of new functionality, and the decommissioning or elimination of unused functionality or low-traffic content throughout the product's life cycle on a case-by-case basis.				
<input type="checkbox"/>	Provide corrective security and policy updates during the product or service life cycle. These should be distinguished from more extensive evolutionary updates.				
<input type="checkbox"/>	Develop sustainable product and data strategies using appropriate training techniques. These should help your team build capacity and learn new skills to manage and maintain products and services over time.				
	Impact & Effort	High		High	
	GRI	High	High	High	High
5.13	Document future updates and evolutions				
	Success Criterion				
<input type="checkbox"/>	When a feature is added, updated, or removed to improve user experience, clear documentation of the changes is provided in a well structured, semantically versioned document.				
	Impact & Effort	Low		Low	
	GRI	Low	Low	Low	Low
5.14	Establish if a digital product or service is necessary				

	<b>Success Criterion</b>				
<input type="checkbox"/>	Identify where the product or service aligns with one of the U.N. (SDGs) and its appropriate targets within a sustainability statement.				
<input type="checkbox"/>	Determine that the product or service is necessary based upon desirability, feasibility, and viability factors.				
<input type="checkbox"/>	Establish that no existing digital product or service offers the same value. Conduct an analysis to understand the market for this requirement.				
<input type="checkbox"/>	Remove or alleviate any obstacles to using a product or service, such as accessibility, equality, technical, or territorial.				
	<b>Impact &amp; Effort</b>	High		Low	
	<b>GRI</b>	High	High	High	High
<b>5.15</b>	Conduct a full life-cycle assessment				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Conduct a life-cycle assessment (LCA) to define sustainability-related functional impacts throughout a product's lifetime.				
	<b>Impact &amp; Effort</b>	Medium		Medium	
	<b>GRI</b>	Medium	Medium	Medium	Medium
<b>5.16</b>	Provide a supplier standards of practice document				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Create specific policies to vet potential partners along the supply chain based on sustainability principles.				
<input type="checkbox"/>	Partner with suppliers to create, track and measure impact on issues that impact affected parties.				
<input type="checkbox"/>	Promote and disclose partnerships in a publicly available place, along with information on how the partnership creates a collective impact.				
	<b>Impact &amp; Effort</b>	High		High	
	<b>GRI</b>	High	High	High	High
<b>5.17</b>	Share economic benefits				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Publicly commit to paying employees, contractors, and other affected parties a living wage.				
<input type="checkbox"/>	Have policies and practices to incentivize affected parties, such as workers and contractors, to meet impact goals.				
<input type="checkbox"/>	Provide benefits to employees in accordance with resources, including, where relevant, healthcare, retirement planning, flex time, profit sharing, and more.				
<input type="checkbox"/>	Advocate for responsible legislation that supports employment rights, transparency, and accountability related to sharing economic benefits.				
	<b>Impact &amp; Effort</b>	High		High	
	<b>GRI</b>	High	High	High	High

<b>5.18</b>	Share decision-making power with affected parties				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Align the project team's goals with key business objectives, and affected parties (for example, project managers) have the power and autonomy to make key decisions on the organization's behalf.				
	<b>Impact &amp; Effort</b>	Low		High	
	<b>GRI</b>	Low	Low	Low	Low
<b>5.19</b>	Use Justice, Equity, Diversity, Inclusion (JEDI) practices				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Document commitments to JEDI practices with clear policies on how marginalized or otherwise underserved communities are prioritized.				
<input type="checkbox"/>	Establish a publicly displayed accessibility policy and demonstrate this via accessible digital products or services.				
<input type="checkbox"/>	Provide JEDI-related training materials and schedule regular workshops related to how this topic manifests itself in digital products and services, covering topics such as algorithmic bias, digital divide, employment, mis- and disinformation.				
<input type="checkbox"/>	Show measurable improvement over time across hiring, leadership, and operations.				
<input type="checkbox"/>	Advocate for responsible legislation relating to JEDI practices, especially as they relate to digital products and services.				
	<b>Impact &amp; Effort</b>	High		High	
	<b>GRI</b>	High	High	High	High
<b>5.20</b>	Promote responsible data practices				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Maintain a publicly accessible privacy policy, terms and conditions, and any other documents as required by law in the jurisdictions in which the product or service operates. Adhere to the most restrictive data protection regulations, especially when providing services outside the organization's country. Provide documents in accessible formats and use clear, user-friendly language to ensure comprehension by all visitors. Avoid unnecessary jargon, technical language, and legalese. Support emerging legislation and implement best practices related to data privacy, sustainability, and responsible data management.				
<input type="checkbox"/>	Demonstrate measurable progress over time in regard to respecting data privacy and ownership. Specify how data disposal and a visitor's "right to be forgotten" will be handled, along with ownership rights. Also, provide the ability to download or export data they have contributed into a non-proprietary format.				
	<b>Impact &amp; Effort</b>	High		Medium	
	<b>GRI</b>	High	High	High	High
<b>5.21</b>	Implement appropriate data management procedures				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Archive and delete outdated or otherwise expired product content and data via automated expiration dates and scheduled product audits. Publish the archiving schedule, ensuring a lightweight version of the old searchable content is maintained for those that may require it.				

<input type="checkbox"/>	Allow users to control, manage, and delete their data, subscriptions, and accounts.			
	<b>Impact &amp; Effort</b>	Low		High
	<b>GRI</b>	Low	Low	Low
<b>5.22</b>	Promote and implement responsible emerging technology practices			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Establish public-facing policies for emerging technologies. Ensure all such technologies and their datasets are ethically sourced, screened, validated, and implemented in a non-discriminatory, responsible manner.			
<input type="checkbox"/>	Show how workers are trained as new technologies and practices potentially disrupt an organisations business model.			
<input type="checkbox"/>	Support and comply with responsible legislation related to emerging technologies			
<input type="checkbox"/>	Audit and account for any environmental considerations that may derive from the use of emerging technologies wishing to be promoted or implemented. This should include third-party choices, the expense in terms of waste or emissions of using the technology to create a desired result, and consequences that may arise from its deployment.			
<input type="checkbox"/>	Ensure all automated tooling, scrapers, spiders, bots, artificial intelligence, and other forms of machine-assisted data gathering abides by requests to opt out at the host, server, or website level. Providers must declare themselves as non-human within the user-agent/HTTP header. Providers must also publish impact reports relating to their gathering activities.			
<input type="checkbox"/>	Do not roll out post-quantum encryption for high-traffic services that do not need resilience against harvest now, decrypt later attacks, where attackers steal encrypted data, anticipating that future quantum computers will be powerful enough to break the encryption and make the data readable at a later date.			
	<b>Impact &amp; Effort</b>	High		Medium
	<b>GRI</b>	High	High	High
<b>5.23</b>	Include responsible financial policies			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Divest from fossil fuels and move banking, sponsorship, and other affiliations to more responsible partners.			
<input type="checkbox"/>	Engage in flexible financing and responsible budgeting to accommodate long-term care and maintenance.			
	<b>Impact &amp; Effort</b>	High		High
	<b>GRI</b>	High	High	High
<b>5.24</b>	Include organizational philanthropy policies			
	<b>Success Criterion</b>			
<input type="checkbox"/>	Establish a clear corporate giving policy and create philanthropic partnerships with strategically aligned organizations.			
<input type="checkbox"/>	Engage in free or volunteer projects to help teams learn new tools and tactics, while also helping charities and non-profit organizations to build capacity.			
	<b>Impact &amp; Effort</b>	High		Medium



	<b>GRI</b>	High	High	High	High
<b>5.25</b>	Plan for a digital product or service's care and end-of-life				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Provide clear, documented end-of-life guidelines that include data disposal, archiving, file deletion, and other relevant guidance.				
	<b>Impact &amp; Effort</b>	Medium		Medium	
	<b>GRI</b>	Medium	Medium	Medium	Medium
<b>5.26</b>	Include e-waste, right to repair, and recycling policies				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Establish specific policies around e-waste recycling and repair owned technology products whenever possible.				
<input type="checkbox"/>	Form relationships with local partners for e-waste recycling and repair.				
<input type="checkbox"/>	Buy refurbished equipment whenever possible.				
<input type="checkbox"/>	Allow consumers to repair the consumables they purchase to the best of their ability, offering replacement components if possible at cost, and provide clear instructions to help resolve faults that occur.				
	<b>Impact &amp; Effort</b>	High		Medium	
	<b>GRI</b>	High	High	High	High
<b>5.27</b>	Define performance and environmental budgets				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Define and document clear sustainability budget criteria that covers impact from creation to consumption. Communicate this to affected parties.				
<input type="checkbox"/>	Use a performance budget to set a target maximum size of your digital product or service to monitor and reduce impact of data transfer, file type size, and more.				
<input type="checkbox"/>	Define KPIs around engineering hours, development time, or sprints while keeping the health and well-being of your workers paramount. Sustainably optimize workflows to allow all tasks to be performed with care.				
<input type="checkbox"/>	Establish a baseline and measurement criteria to track improvements over time. Improvement claims must be evidenced and verifiable.				
<input type="checkbox"/>	Invest in resources to build capacity and maintain budgets over time.				
	<b>Impact &amp; Effort</b>	Medium		Medium	
	<b>GRI</b>	Medium	Medium	Medium	Medium
<b>5.28</b>	Use open source where possible				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Establish a clear open source policy that outlines how open-source tools are used and any practices used to support open-source development.				
<input type="checkbox"/>	Show a track record of collaboration and building communities around open-source principles.				

<input type="checkbox"/>	Contribute regularly in terms of code, human-time, and/or financially, to open-source community-based projects.				
	<b>Impact &amp; Effort</b>	High		High	
	<b>GRI</b>	Medium	Medium	Medium	Medium
<b>5.29</b>	Create a business continuity and disaster recovery plan				
	<b>Success Criterion</b>				
<input type="checkbox"/>	Create, regularly review, and occasionally test a plan of action to determine readiness in case of an incident and establish procedures to quickly recover from any incident.				
<input type="checkbox"/>	Maintain regular and transparent communication with the audience regarding issues that may affect service delivery or user data.				
	<b>Impact &amp; Effort</b>	Low		Medium	
	<b>GRI</b>	Low	Low	Low	Low