Some questions, answers and tips

Q: What is a "scenario"?

One dictionary definition says "a description of possible actions or events in the future" (https://dictionary.cambridge.org/dictionary/english/scenario).

There are countless academic papers that drill in deeper to the various scenario methodologies (see e.g. the link below), but the basic idea is that you produce a narrative, a plausible story, for how and why your chosen sector goes from where it is today to a low carbon state in 2050 (guided also by the questions and notes in the assignment text). You only have a limited number of words in which to do this, and the other elements requested in the assignment text, so you need to prioritise and determine what is central for your specific analysis and what can be covered more concisely (while still making sure you do all that you've been asked to do).

Q: Can I use an already available scenario for my essay?

No, as the assignment states, you must create your own scenario. You are allowed to benchmark your scenario on pre-existing ones to ensure its quality and accuracy, but you must show original work.

Q: There are many elements mentioned in the assignment text, how should I focus the report?

The creation of the scenario narrative is the key point of the course project. All the elements mentioned before that are also important, as they explain the context of your scenario, but the central outcome of the exercise is the scenario description. As a rule of thumb, roughly 70% of the final grade comes from the scenario narrative design, description and analysis, 20% from introduction, context and description of the current energy system and 10% from presentation.

Q: How do I cover everything mentioned in the assignment text, while staying below 2500 words?

You must decide what level of granularity and aggregation you choose for specific elements of the assignment. What you should emphasise depends on your specific sector and country and you thus

need to determine what's central in your scenario description. Learning how to limit and decide on information hierarchy is a part of this assignment.

Q: Do I need to cover all parts mentioned in the assignment?

Yes, you must cover all aspects of the assignment that's been asked.

Q: What is considered "a sector"?

An energy sector is a sector such as transportation, industry, residential, resource extraction & processing, or an energy conversion sector (e.g. electricity generation). The sector can be broader (e.g. industry) or narrower (e.g. mining industry), but with a clear justification and argumentation to back your choice and focus. Do not pick something that, rather than a sector, is an answer, problem and/or an energy vector (e.g. renewables. Or fossils).

Q: I'm thinking of focusing on sector X, would this seem like a good choice?

You need to establish the sector to focus on through a close reading and analysis of the literature, and justify your decision using that literature and your own argumentation. Your sector defines how you structure the rest of your essay. It's better to focus on one sector for your analysis rather than taking two or more to look at – going wide would mean it's more difficult to go deep, within the word limit. Making the final decision on the sector is very much part of the assignment.

Q: If the lecture material and readings do not at all fit with the country and sector I am studying, should I still somehow use them in my text?

You have to ensure that you cover the material appropriate for your case study. If your chosen sector and country are such that the lecture materials and readings are difficult to include, you should not try to force them in. Perhaps more important is to make sure that you *do* reflect them when they *are* appropriate for your sector and country, as we will look for this then

Q: What type of citation style should I use?

You can use any style if it is consistent throughout the report. Harvard in-text citation style, for example, would be appropriate, here is a link that gives further examples of the style: https://www.open.ac.uk/library/referencing-and-plagiarism/quick-guide-to-harvard-referencing-cite-them-right

You can also use bibliographic software, such as Zotero (Open source) or Mendeley, which help you ensure that you cite sources in the correct format and also write the bibliography correctly.

Q: What are good sources to use?

Peer reviewed academic sources are clearly the best option. The information in them has gone through rigorous scrutiny and is therefore preferable over sources of any other type. You can use online databases such as Scopus (www.scopus.com), Aalto University Library Search Catalogue (https://primo.aalto.fi/, focus on peer reviewed literature) or
ScienceDirect (https://www.sciencedirect.com/). Academic, peer-reviewed journal articles should be the primary source type you use for your essay. Grey literature, such as governmental, IEA or EU reports, can be used if needed, but should be treated with caution. Grey literature isn't formally peer reviewed, at least not the way journal papers are, and thus one needs to be more careful with the information contained in them. Use of popular media references (e.g. BBC, YLE, HS) is strongly discouraged (rather find the primary source the popular media article is using).

-Further tips for grey literature [adjusted from: https://uow.libguides.com/literaturereview/grey-literature]

Use the same skills you would use to evaluate any other material:

Consider the authors, their affiliations and qualifications.

Check reference lists to see who and what other material has been taken into account (and what not).

Any data collection methods and analysis should be transparent.

Check the date and currency of any information and try to find an update if it is older.

Check the dates of references to make sure the authors aren't relying on out-of-date information.

Q: Do I need to include a table of contents?

No, you do not need one.

Other tips

Make sure you develop a coherent, integrated narrative in which the technical solutions are just one part. Don't focus just on describing what the system looks like, but rather on why and how it gets there.

Scenario is a discrete and specific story about how things unfold, rather than a space of possibilities (these can be considered in the discussion of uncertainties). Do not be ambiguous or use conditional words (e.g. could, would) a lot in your narrative: In your scenario something very specific does happen, for specific reasons, and you need to describe that.

There are papers given at the end of the course project assignment text and it's highly recommended you skim through at least sections 5 & 6 of Hughes et al., 2013 and section 3 of O'Neill et al., 2017.

Pay attention to argumentation and referencing – and use the latter to support the former.