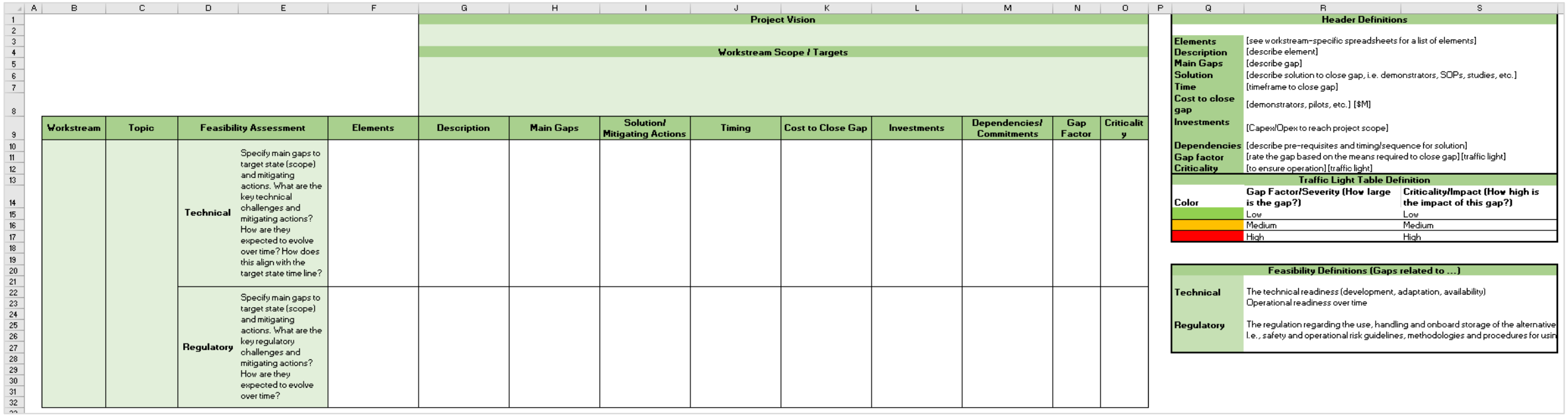
5J. Alternative fuels supply chain

Summary of chapter findings and outcomes

01	• **Proposed source of alternative fuels** for the specific green corridor (source of renewable energy, feedstock, and fuel production centers) and **evolution of alternative fuel supply and demand** over time for regions relevant to the corridor (local or international/ imported)
02	**Technical feasibility** of alternative fuel production for the specific green corridor, including: • Expected feedstock production locations and capacity • Fuel production locations and capacity • Transportation of fuel to relevant region in corridor
03	**Regulatory feasibility** of alternative fuel production projects and permits related to their development for a specific green corridor: • Regulatory and policy structure to allow/enable alternative fuel and feedstock production, storage and distribution (e.g., for hydrogen, carbon capture, storage, and transport) • Regulations on scale of alternative fuel production, and health and safety guidelines on handling, storage, and use • Carbon credits and other tailwinds • Measures to ensure a just and equitable alternative fuel production
04	**Cost assessment** of alternative fuel production project development relevant to the specific green corridor, including: • Resulting CapEx requirements • Expected cost of production and potential price of alternative fuels, and their evolution over time • Financing and funding options
05	**Just & Equitable:** • An analysis from a J&E perspective will provide insights on how workers, communities and ecosystems might be affected by the offtake of alternative fuels within the green corridor. There might be socio-economic opportunities and risks. It is important that work is done to maximize the opportunities and minimize the risks

Workstream gap analysis – Alternative fuels supply chain



Project Vision

Workstream Scope / Targets

Workstream	Topic	Feasibility Assessment		Elements	Description	Main Gaps	Solution/ Mitigating Actions	Timing	Cost to Close Gap	Investments	Dependencies/ Commitments	Gap Factor	Criticality
		Technical	Specify main gaps to target state (scope) and mitigating actions. What are the key technical challenges and mitigating actions? How are they expected to evolve over time? How does this align with the target state time line?										
		Regulatory	Specify main gaps to target state (scope) and mitigating actions. What are the key regulatory challenges and mitigating actions? How are they expected to evolve over time?										

Header Definitions

Elements	[see workstream-specific spreadsheets for a list of elements]
Description	[describe element]
Main Gaps	[describe gap]
Solution	[describe solution to close gap, i.e. demonstrators, SOPs, studies, etc.]
Time	[timeframe to close gap]
Cost to close gap	[demonstrators, pilots, etc.] [$M]
Investments	[Capex/Opex to reach project scope]
Dependencies	[describe pre-requisites and timing/sequence for solution]
Gap factor	[rate the gap based on the means required to close gap] [traffic light]
Criticality	[to ensure operation] [traffic light]

Traffic Light Table Definition

Color	Gap Factor/Severity (How large is the gap?)	Criticality/Impact (How high is the impact of this gap?)
	Low	Low
	Medium	Medium
	High	High

Feasibility Definitions (Gaps related to …)

Technical	The technical readiness (development, adaptation, availability) Operational readiness over time
Regulatory	The regulation regarding the use, handling and onboard storage of the alternative I.e., safety and operational risk guidelines, methodologies and procedures for usin

Throughout the Feasibility assessment, fill the table with insights on **technical and regulatory feasibility**[3] – specifically, use this table to highlight **gaps and ways to close them**

Legend and definitions

3. Cost assessment is covered under the residual cost gap analysis methodology