

SUNFLOWER OIL BOTTLING

Lebanon | Selected pre-feasibility portfolio preview

EL HELLANI ADVISORY

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Based on the 31-page visual proposal prepared 27 October 2026.

This is a proposed project, not an operating factory or a client result.

The concept bottles imported refined oil; it does not refine crude oil.

Included: investment logic, layouts, 3D concept, operations and risks.

Excluded: detailed commercial cost build-ups, cash ledger and
supplier-level execution schedules.

Expanded evidence and scenario analysis added 28 October 2026.

Your factory | 3D concept



AI-generated architectural concept: whole workshop, filling station, tank bay and exterior. These illustrations explain the intended scale and appearance; equipment geometry and building details must follow the measured plan and supplier drawings.

How to read the pictures

Four tanks hold imported finished oil. The small filling station puts it into bought-in bottles. Staff cap, label, inspect and pack each batch. The workshop is designed for careful manual handling at modest volumes.

Money made simple | no tiny decimals

All money in this edition is shown in whole US dollars. Small unit costs are presented for 1,000 litres or batches of 100 packs. Calculations retain precision internally; rounding is for readability and may produce small differences in table totals.

What you want to know	Where to look
How much must I invest?	\$120,000 funding page: equipment, first stock and cash shown separately.
How much does making the product cost?	Batch economics: cost of 1,000 litres and of 100 bottles/canisters.
What do I earn?	Monthly profit: sales minus product costs, then rent and staff.
Can I buy the next shipment?	Cash calendar: when buyers pay and when supplier payments fall due.
What must happen before I start?	Launch gates: verified prices, permissions, customer orders and supplier terms.

EBITDA means operating earnings before equipment depreciation, financing and profit tax. It is not the amount you can safely withdraw. Working capital means money tied up in oil, packaging, customer invoices and replenishment.

01 | Investment decision

Decision item	Rebuilt plan
Recommended maximum investment	\$120,000 total; no bank loan assumed
Premises	Approximately 250 m ² , ready for conversion to licensed food use
Process	Buy refined, deodorized sunflower oil; receive, test, bottle and sell locally
Sales target	15,000 L/month: 3,000 x 1 L and 2,400 x 5 L
Staff	Working owner, one operator, a part-time helper; outsourced bookkeeping/QA
Oil shipment	22 tonnes; approximately 23,793 saleable litres after 0.5% loss
Replenishment	One container roughly every 48 days at target sales
Monthly net sales	\$32,193 after 2% commercial deductions
Monthly EBITDA	\$1,255 before depreciation, financing and profit tax
EBITDA break-even	Approximately 10,576 L/month
Main funding conditions	Customers pay within 7 days; oil supplier accepts 30%/70% staged payment

Conditional go, not an unconditional approval. This workshop can fit the ceiling only if ready-to-use premises, equipment quotations, the sales price, supplier terms and the cash cycle are confirmed. If those conditions fail, preserve the budget by starting with outsourced bottling or finished packaged imports.

A \$100,000 version of the same own-workshop model runs short of replenishment cash in the simulation. The recommendation is therefore the upper end of your preferred range: \$120,000, with a strict spending gate.

03 | Evidence and remaining uncertainty

Evidence level	Meaning in this report
Published fact [source number]	Official tariff, ministry procedure, trade data, retailer listing or manufacturer specification. Publication does not equal a binding quote.
Planning assumption	A chosen budget, price or operating parameter. It must be replaced by a written offer before spending.
Calculated result	Arithmetic derived from the stated assumptions. It is not an independently verified business outcome.
Unresolved condition	A legal, technical or commercial question that must be cleared before commitment.

What was specifically rechecked

Market competition, published shelf prices, Lebanese customs/VAT treatment, food-factory registration, industrial permits, smaller filling machines and shipping reference columns were reviewed again.

Shipping correction: the WestComTrans table lists Beirut at **\$3,150 for a 20-foot container** and \$4,450 for 40-foot packaged cargo [6]. This plan retains **\$4,450 as a conservative freight budget**: \$3,150 published reference plus \$1,300 unquoted allowance for surcharges. It is not presented as a confirmed 20-foot freight offer.

Not obtained: binding oil/packaging/tank quotations, a suitable signed lease, customs ruling, bank approval, customer orders, insurer terms, or a local payroll compliance calculation. The \$120,000 is a funding design and spending ceiling, not a supplier-guaranteed project price.

04 | Market size and competitors

WITS/UN Comtrade reports Lebanon imported **45,205.5 tonnes worth \$61 million in 2024** under HS 151219 [1]. This category combines sunflower/safflower oils other than crude and does not separate bulk from bottled product. It measures an import flow, not current retail consumption.

Origin	2024 imported tonnes	Approximate volume share
Turkey	24,417.5	54.0%
Ukraine	17,025.0	37.7%
Saudi Arabia	1,418.7	3.1%
Russia	1,041.3	2.3%
Other origins	1,303.1	2.9%

At 180,000 L/year, the workshop target equals about 0.37% of this import volume converted at 0.92 kg/L. This shows that the target is small relative to imports; it does not prove customers will switch to a new brand.

Local competition and the state

SHD publicly describes a Lebanese oil-refining operation and the local sale of refined sunflower oil in bulk [2]. Established import brands and supermarket private labels are also direct competitors. Local bulk oil is worth quoting as a backup or first-stage supply option.

The reviewed sources do not establish a state monopoly on sunflower oil. Obtain local confirmation of importer eligibility, current restrictions and trade protections. Absence of a monopoly is not the same as absence of regulation.

No reliable brand-level sell-out data or 2026 growth rate was obtained. Before launch, audit 30 shops and secure repeat-order commitments. The existence of shelf listings alone does not establish sales velocity.

06 | The \$120,000 funding plan

Allocation	USD	What it covers
Setup and launch ceiling	48,000	Equipment, fit-out, permits, deposit, commissioning and contingency
First landed oil shipment	39,320	22 t, including conservative shipping, insurance, 8% levy reserve and destination costs
First packaging stock	3,212	Packaging for about 23,793 saleable litres at \$135 per 1,000 L
Operating and replenishment cash	29,468	Second-order deposit, payment timing, fixed costs and early operating liquidity
TOTAL FUNDING	120,000	No additional financing assumed

The first oil shipment and packaging are working assets, not equipment cost. The \$29,468 cash allocation cannot be used to upgrade machines, buy a vehicle or fund personal withdrawals. It is needed to keep importing after the first batch.

What if only \$100,000 is available?

Keeping the same workshop leaves only about \$9,468 starting operating cash. Under the same 7-day collection and staged-payment assumptions, the daily model reaches approximately **negative \$12,766**. That means a funding failure even though the steady-state profit calculation is positive.

At \$100,000, the recommended alternative is an outsourced-bottling or finished-import pilot. Do not buy the same workshop and hope sales will fund the missing cash. An outsourced price and licensing arrangement must be obtained before calling that alternative fully feasible.

08 | Equipment photo and buying criteria

Two Head Semi Automatic Volumetric Cooking Oil Liquid Filling Machine



Illustrative photo: Filltech semi-automatic cooking-oil filler, official manufacturer product page [7]. The pictured 100-1,000 ml model does not by itself establish 5 L capability. It is an equipment example, not an approved purchase.

Manufacturer pages show that small two-head oil fillers exist [7,8]. Marketplace 5 L listings show broad asking-price ranges [9]. None is a complete installed food-production system; advertised speeds and prices must not be treated as final workshop performance or delivery cost.

Acceptance condition	Evidence to demand
Pack formats	Demonstrate your exact 1 L bottle and 5 L canister; correct dosing range, cap and label geometry.
Food safety	New food-contact parts; material certificates for steel, seals and hoses; cleanable design. Do not reuse a chemical-oil machine.
Output	At least 200 complete 1 L packs/hour or 100 complete 5 L packs/hour as an end-to-end planning target.
Accuracy	Calibrate on actual oil and temperature; comply with Lebanese net-content rules confirmed by metrology specialist.
Support	Operating manual, electrical diagram, spare seals, warranty, local/remote service and commissioning.

09 | Premises and schematic layout

Target: approximately **250 m²**, ground-level industrial access where possible, with a lawful outside container-unloading position. Rent allowance: \$500/month, not a signed offer. Zahle listings include low-cost warehouses but suitability and asking prices vary [10].

20 m x 12.5 m = 250 m² gross concept

Bottles / caps 33 m²	Fill / cap / label 44 m²	Finished stock 33 m²
1.5 m corridor - 30 m ²		
Tanks / receiving 44 m²	Quarantine / QC 27.5 m²	Staff / office / utilities 38.5 m²

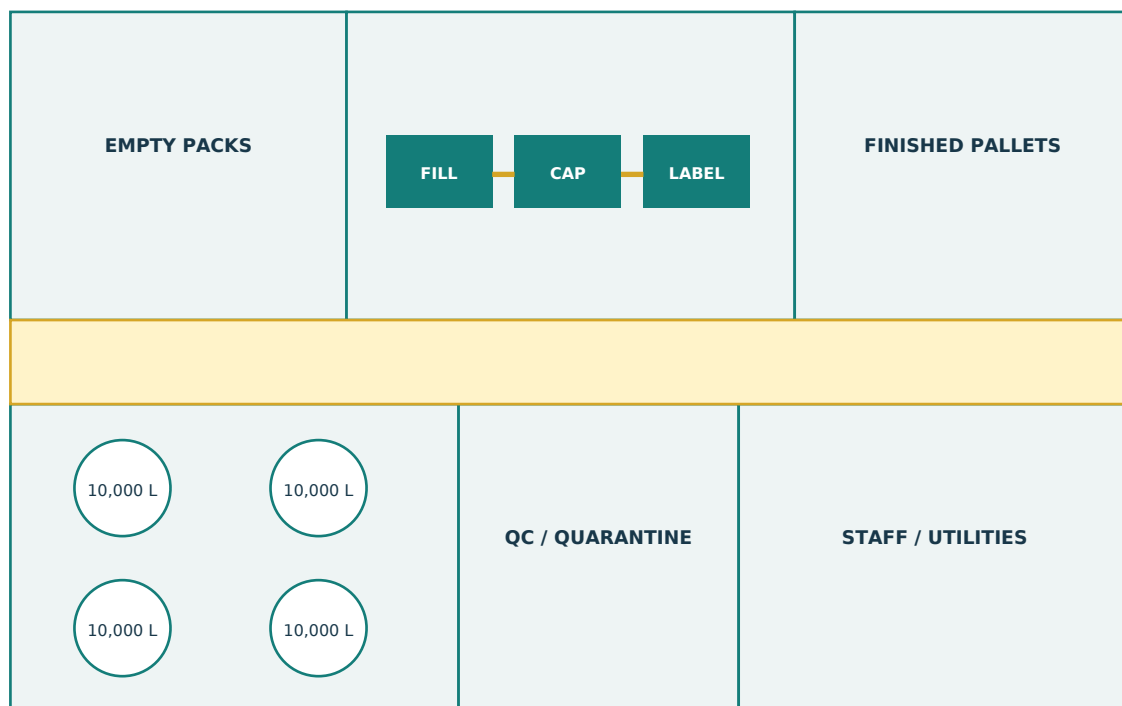
Concept only, not a construction drawing. Zone areas including the corridor total 250 m² before wall thickness. Traffic aisle width, fire exits, wash facilities, ventilation, drainage and production zoning must be approved for the actual site. Outdoor unloading space is additional.

At 0.92 kg/L a full 10,000 L tank contains about 9.2 tonnes of oil plus tank weight. A structural engineer must approve the floor and supports. The low fit-out budget assumes no major structural works. A basement listing cannot be selected only because it is cheap.

Measured production layout | equipment

Dimensioned planning picture: 20 m long by 12.5 m wide. Equipment positions are conceptual and must be checked against actual machine drawings, floor loading and fire regulations.

20 m overall length



Overall width: 12.5 m | main corridor: 1.5 m | gross area: 250 m²

Follow the materials

Oil: outside unloading point to tank bay, then closed food-grade hoses/piping to the filler. **New packaging:** empty-pack store to fill, cap and label stations. **Finished goods:** inspect, carton-pack and move to the pallet store before dispatch.

The fill/cap/label section occupies an 8 m by 5.5 m room. The receiving/tank room is also 8 m by 5.5 m. Keep the central passage clear. Personnel access and emergency exits require the local engineer's final design. The conceptual line may need guards, small transfer tables or extra clearance.

Visual guide | what the money does

Setup and launch

 **48,000**

First oil shipment

 **39,320**

First packaging

 **3,212**

Cash to keep operating

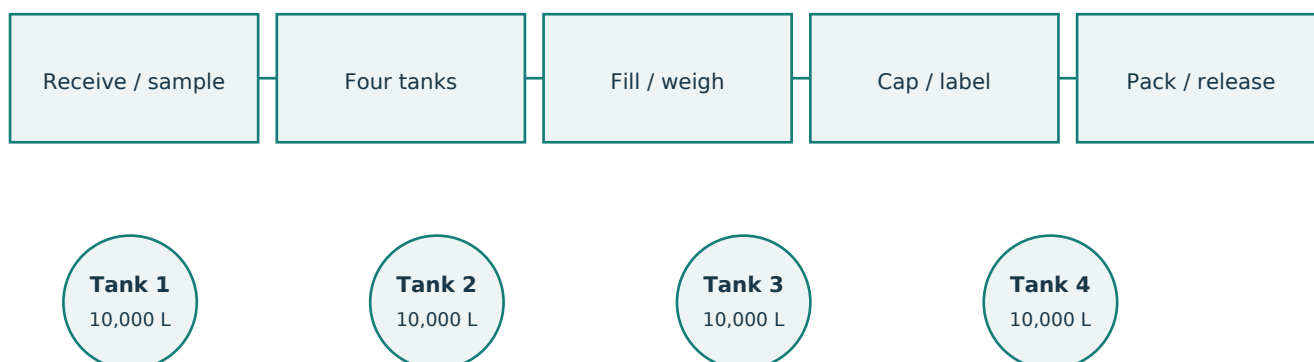
 **29,468**

Why the cash reserve matters

Oil arrives in large batches while customers buy small quantities. You must pay the next supplier deposit and balance before every bottle from the first batch has been sold. The reserve bridges those dates. Buying more machinery with it can stop an otherwise profitable business.

Useful flexibility	Practical rule
Sales are slower	Reduce packing days and delay the next order using an updated forecast; keep quality controls.
Sales are faster	Check transit time and cash before promising extra volume; overlapping imports may need more funding.
Machines cost more	Use the setup contingency or simplify optional automation. Do not take money from the next shipment.
Customers want credit	Limit exposure or decline the terms until additional working capital is available.

10 | Process and tank operation



Use separate tank valves and lot identification. Four nominal 10,000 L tanks allow one partly used old lot to remain segregated while a new approximately 23,913 L shipment is distributed across three empty tanks, subject to verified usable volume and headspace.

For planning, use 90% of each tank as working capacity, approximately 9,000 L. Three empty tanks provide 27,000 L usable, enough for the planned shipment. Consolidate only the same released lot; never blend untested incoming oil into an old released lot. Tank cleaning, drying and release must be scheduled.

Routine production

Sample every receipt; quarantine until accepted. Transfer through food-grade closed piping and a protective filter. Fill new food-grade bottles, check mass/volume, torque and leakage, apply the approved label and LOT, then box and palletize. Hold finished product until release by the designated competent person.

Oil identity, oxidation or contamination cannot be corrected by a simple filter. The supplier must provide refined food-grade oil; the workshop is a packer, not a refinery.

11 | Throughput, people and overhead

Monthly target: 15,000 L	Planning hours
3,000 bottles of 1 L at 200 packs/hour	15
2,400 canisters of 5 L at 100 packs/hour	24
39 nominal hours / 65% useful efficiency	60
Available 22 days x 8 hours	176

These deliberately modest complete-line rates are assumptions to prove at acceptance testing. The operator and owner handle the main packing process; the helper supports batch days. The owner spends substantial time selling and collecting payments. Do not promise industrial-scale output from this crew.

Monthly fixed cost	USD
Owner: management, purchasing and sales allowance	700
Full-time operator	550
Part-time packing / warehouse helper	250
External bookkeeping and food-quality support	200
Payroll/social/leave allowance, subject to local review	150
Rent	500
Fixed utilities and power availability	150
Insurance, hygiene, pest and QA retainer	200
Sales travel and sampling	150
Administration, software and other fixed reserve	150
TOTAL MONTHLY FIXED COST	3,000

Wages and statutory charges are unverified budget allowances, not confirmation of compliance with minimum pay, NSSF or employment rules. Obtain a local payroll calculation before hiring. Laboratory batch work and sanitation consumables are also included in variable processing cost.

18 | Profit scenarios and downside

Parameter	Low-sales case	Planning case	Conditional upside
Sales L/month	8,000	15,000	20,000
Oil FOB USD/t	1,350	1,350	1,250
Invoice per 100 packs: 1 L / 5 L	235 / 1,075	235 / 1,075	245 / 1,125
Fixed monthly USD	3,000	3,000	3,400
Monthly EBITDA USD	-731	1,255	6,230

Upside combines cheaper purchasing, higher selling prices and more sales. It is not a forecast and is not the launch design. At 20,000 L/month, one 22 t shipment covers only about 35.7 days: a 45-day supply lead requires overlapping shipments and more working capital or a redesigned supply arrangement.

Single-factor sensitivity at 15,000 L/month

Change, all else equal	Monthly EBITDA, USD
Oil FOB rises to \$1,450/t	-243
Oil FOB falls to \$1,250/t	2,753
Invoice price of 5 L falls to \$10	-509
Freight increases by \$1,000/container	574
Fixed costs rise by \$500/month	755
Packaging increases \$30 per 1,000 L	805

The project should be judged on the planning case and downside. At 8,000 L/month it loses about \$731 EBITDA each month, even with the owner working. If sales stay below break-even for three months, reduce fixed commitments or stop the own-workshop model.

21 | Quality control and risk controls

Stage	Control
Supplier approval	Food-grade refined oil specification; producer identity, COA, independent sample and complaint procedure.
Import receipt	Verify seals, documents, mass, condition, sampling and laboratory acceptance. Quarantine incoming lots.
Bottles and caps	New food-contact packs; compatibility, leak/stack/drop checks, cap torque and tamper evidence.
Filling	Regular checks of fill mass/volume, temperature correction as required, labels and legible LOT/date.
Storage	Closed tanks, protection from light/heat and water ingress; pest prevention; FEFO stock control.
Recall	Map supplier/container to tank to bottle LOT to every buyer; retain samples and conduct a practice trace.

Shelf life and release

Do not reset shelf life simply because oil is bottled locally. A competent food technologist must validate the remaining shelf life, bottle barrier, storage conditions and testing plan. Obtain the applicable current Codex and Lebanese standards rather than copying marketing specifications.

Supply and insurance

Obtain written carrier approval for the flexitank and food product. Check cargo insurance exclusions, deductible, leakage cover and route/war-risk cover. Do not assume food trade guarantees acceptance by every bank or shipping line; check the actual counterparties and route.

Keep a written local bulk-supply backup price, for example through inquiries to established refiners. It is not included as a cheaper input in this model. If emergency supply costs more, accept a temporary margin reduction only after recalculating cash.

22 | Launch schedule and stop gates

Stage	Required result	Spending rule
Weeks 1-3	Customer price/payment validation, three comparable quotes per key input, broker and bank check	No machine deposits
Weeks 3-6	Site inspection, permission path, floor load, packaging and label review, updated daily cash model	Only reversible professional work
Weeks 6-12+	Permits, fit-out, equipment delivery and acceptance, supplier payment agreement	Setup remains $\leq$ \$48k
First import	Oil COA, carrier/insurance approval, all documents, available tanks and payment calendar	First oil $\leq$ \$39k at model terms
First 60 operating days	Repeat sales and collections; verify true cost per pack	No owner profit distributions

Timing is indicative; approvals and imported machines may take longer. The small pre-opening allowance assumes a ready building and limited idle rent. If delays create extra cost, revise scope before committing. Do not compress inspection or licensing to meet a target date.

Stop before investing if any gate fails:

1. Setup cannot be delivered within \$48,000.
2. No credible route to at least 10,576 L/month at the target prices.
3. Customers require 30+ day credit.
4. Oil supplier requires full FOB prepayment without another cash solution.
5. Projected cash falls below the reserve floor or the supply lead is unmanageable.
6. The site or product cannot be lawfully approved.

If the own-workshop gates fail, the budget can still fund a smaller commercial pilot through licensed contract packing or finished imports. That route requires its own quotations and should not be presented as an already contracted service.

24 | Sources and verification notes

Sources reviewed 27 October 2026; publications may contain earlier observations. Official tariff snippets do not settle the application of every footnote or levy to your shipment. Obtain written local confirmation. Supplier webpages are not binding offers.

[1] WITS / UN Comtrade: Lebanon HS 151219 imports, 2024

<https://wits.worldbank.org/trade/comtrade/en/country/LBN/year/2024/tradeflow/Imports/partner/ALL/product/151219>

[2] SHD: Lebanese refining and bulk sunflower oil

<https://shd.com.lb/>

[3] Sibline Coop: oil category and public shelf prices

<https://coop.siblinelb.com/products/category/oil?type=list>

[4] Spinneys: private-label sunflower oil, 5 L

<https://www.spinneyslebanon.com/bv-sunflower-oil.html>

[5] Spinneys: oil category, Plein Soleil

<https://www.spinneyslebanon.com/default/food-cupboards/oils-ghee.html>

[5a] Spinneys: Mazola 5 L product page

<https://www.spinneyslebanon.com/default/mazola-sunflower-oil-616299-v001.html>

[6] WestComTrans: freight table, 20 ft vs 40 ft columns

<https://wctcorp.ru/en/uslugi/export-transportation/sunflower-oil-export/>

[7] Filltech: semi-automatic fillers and illustrative photograph

<https://www.filling-machine-india.com/two-head-semi-automatic-liquid-filling-machine.html>

Sources | continued

[8] Pure Oil Press: two-head 100-1,000 ml food/oil filler

<https://www.pureoilpress.com/en/product/two-head-liquid-filler-100-1000-ml>

[9] Made-in-China: 5 L Dongtai listing; unquoted asking range

https://www.made-in-china.com/price/prodetail_Pressure-Filling-Machine_fALRcuXJoYUx.html

[10] OLX Zahle: warehouse listings; asking rent, not food approval

<https://www.olx.com.lb/properties/commercial-for-rent/zahle/>

[11] Lebanese Customs: Chapter 15 tariff, HS 1512.19

https://www.customs.gov.lb/Tariff/Tariff_Table.aspx?CH=15

[12] IDAL: corporate-profit tax reference

https://www.investinlebanon.gov.lb/en/business_support_unit/grow_together/know_your_taxes

[13] Ministry of Industry: industrial permit forms

<https://industry.gov.lb/FormsApplications/PermitFormPage>

[14] Ministry of Agriculture: plant-origin food factory registration

<https://agriculture.gov.lb/Subjects/Rural-Development-and-Natural-Resources/agri-industries/administrative-transactions/register-food-factory>

[15] Ministry of Finance: VAT exemptions and import treatment

<https://www.finance.gov.lb/ar-lb/Taxation/Companies/VAT/Pages/Levying-the-VAT.aspx>

Limits of verification

Arithmetic, funding allocation and model identities were recalculated. Every page was rendered for layout review. Public evidence was separated from assumptions. None of these checks is equivalent to a supplier guarantee or a site inspection.

The machinery photo is credited to its manufacturer and illustrates a small filler. The tank layout and financial tables are original planning material. The project has not been built; the drawings are not engineering-certified.

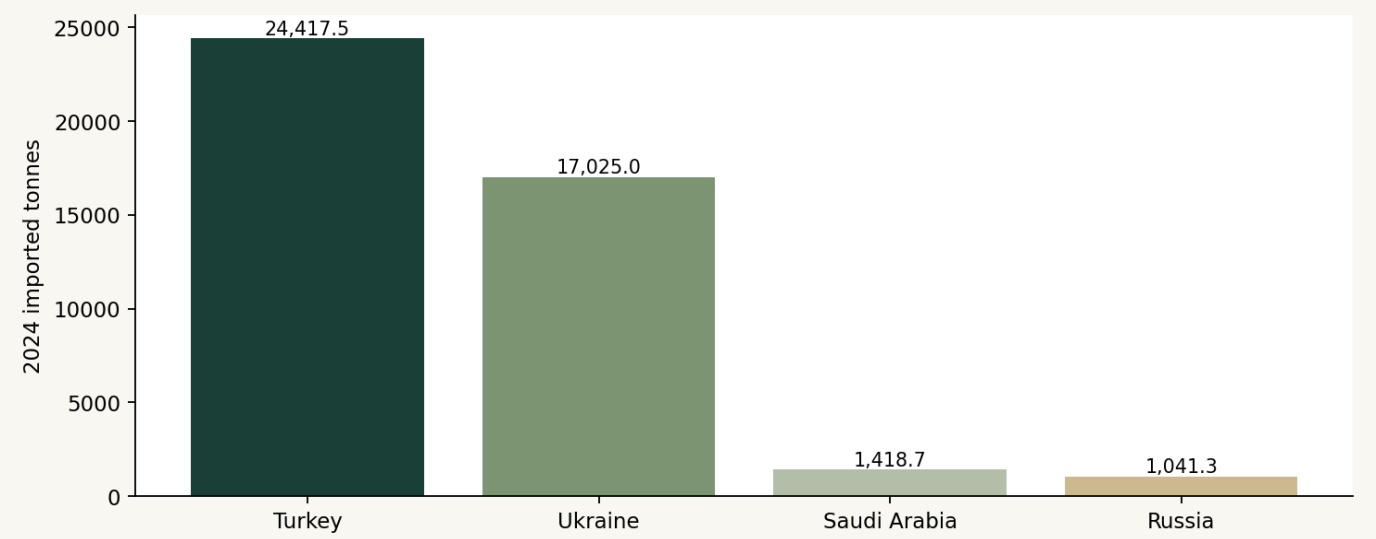
Numbers to replace before commitment

Oil FOB and its included charges; complete freight/insurance/port quote; applicable customs cost; tank/equipment delivery total; premises/fit-out; legally compliant payroll; packaging MOQ/cost; actual wholesale realization and collection days. Re-run the 90-day cash calendar after each change.

EXPANDED ANALYSIS | 28 OCTOBER 2026

Import origins: concentration and scale

WITS/UN Comtrade records 45,205.5 tonnes and USD 61.332 million of Lebanese HS 151219 imports in 2024. The category includes non-crude sunflower and safflower oil, combining bulk and bottled flows. It is not a retail sell-out dataset. [E4]



E4: WITS/UN Comtrade. Four leading origins shown; other origins excluded from this chart.

Calculated context	Result
Turkey + Ukraine	91.7% of import mass
Workshop annual sales target	180,000 litres
At assumed density 0.92 kg/L	165.6 tonnes, about 0.366% of imports
Aggregate import value / mass	About USD 1.357/kg; not a delivered supplier quote

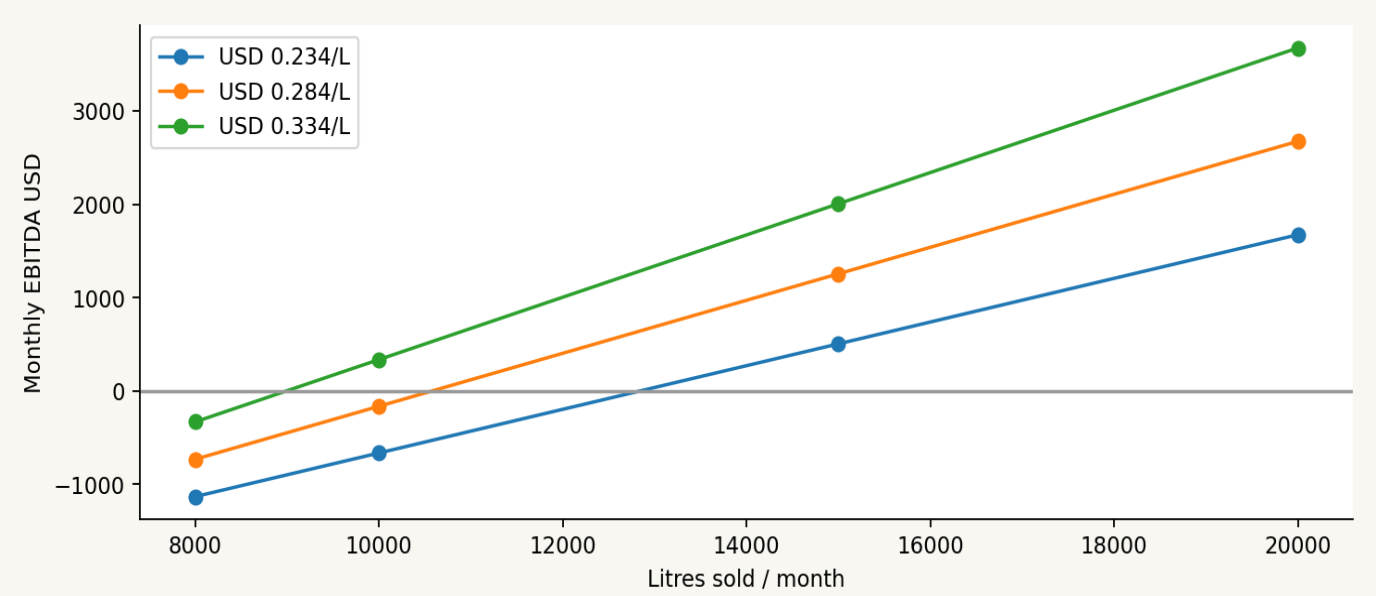
Concentration creates a reason to compare supply options, not proof of an available discount. The target share looks small but still needs switching customers, retailer margins and reliable collections. Do not use aggregate customs unit value to replace a specific food-grade offer. Imported value may reflect different packaging, commercial terms and product quality.

E4 | WITS primary table, 2024 trade; rechecked 28 October 2026.
<https://wits.worldbank.org/trade/comtrade/en/country/LBN/year/2024/tradeflow/Imports/partner/ALL/product/151219>

EXPANDED ANALYSIS | 28 OCTOBER 2026

Contribution sensitivity: thin margins matter

The existing planning case has 15,000 litres/month, USD 3,000 fixed costs and about USD 1,255 EBITDA. That implies approximately USD 0.2837 contribution per litre. The rounded contribution below is derived from that case; it is not a new supplier quotation.



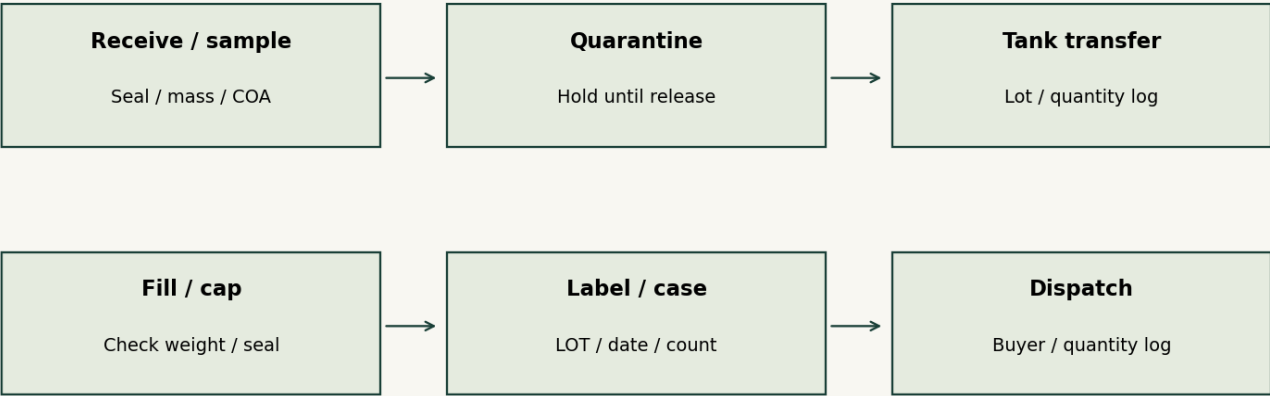
Contribution sensitivities of minus/plus USD 0.05 per litre around the existing rounded base.

Sensitivity at 15,000 litres	Calculated effect
USD 0.05/L lower contribution	USD 750 less EBITDA; about USD 505 remains.
USD 0.10/L lower contribution	USD 1,500 less EBITDA; about USD 245 loss.
Base break-even	About 10,576 litres/month.
USD 0.05/L lower contribution break-even	About 12,839 litres/month.

A narrow margin can be erased by freight, packaging, deductions or collection losses. Apply the change to saleable litres, not container gross litres. EBITDA excludes depreciation, financing and tax and cannot be withdrawn while replenishment cash is needed. Reprice only after checking retailer acceptance; the volume response to a higher selling price has not been measured.

EXPANDED ANALYSIS | 28 OCTOBER 2026

Tank allocation and traceable product flow



Sequence diagram | illustrative operating controls, not engineering instructions

Control schematic for purchased refined oil. No crude-oil refining is included.

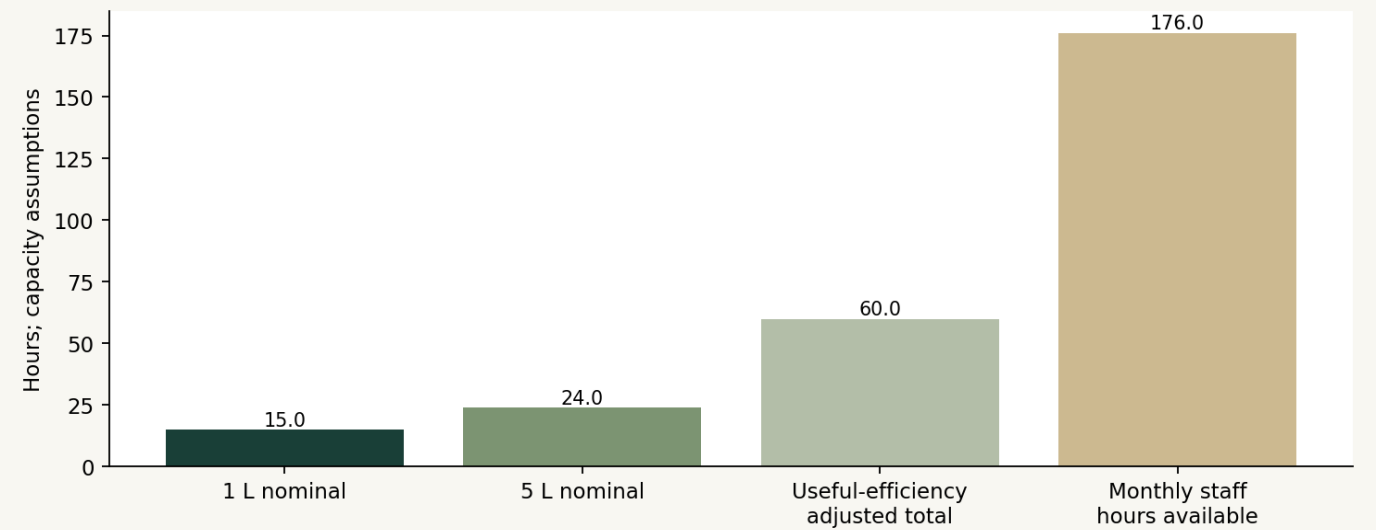
Tank / batch arithmetic	Calculated implication
22,000 kg / 0.92 kg per litre	23,913 gross litres
After assumed 0.5% loss	23,793 saleable litres, rounded
Saleable shipment / 15,000 L monthly sales	1.586 months; about 47.6 days using 30-day months
One full 10,000 L tank	9.2 tonnes of oil before tank self-weight

Tank capacity alone does not prove the receiving sequence works. Reserve usable ullage, segregate held product and confirm whether the next shipment arrives before tanks are emptied. Label valves and lines, record transfers and prevent accidental lot mixing. A structural engineer must assess actual supports, load distribution and the delivery route. The density and loss are model inputs, not lab results for the shipment.

The final equipment arrangement must allow cleaning, safe isolation, sample access and pest control. A process arrow is not a piping specification. Keep retained samples and a buyer-by-batch dispatch record so a simulated recall can identify both stock on hand and product already sold.

EXPANDED ANALYSIS | 28 OCTOBER 2026

Labour, collections and release gates



Existing case: 3,000 x 1 L at 200 packs/hour; 2,400 x 5 L at 100 packs/hour; 65% useful efficiency.

Liquidity / execution test	Implication
7 to 30 days collection	About USD 24,681 extra receivables at USD 32,193 monthly net sales, using 30 days.
Starting operating / replenishment cash	USD 29,468 within USD 120,000 total funding.
Extra receivables vs this reserve	About 83.8%; shows why longer credit is a stop gate.
Packing hours	60 / 176 = 34.1%; selling and handling still require time.

The receivables calculation is an incremental steady-sales timing illustration, not a replacement for the daily import cash model. Shipment deposits and balances may overlap customer credit. The apparent unused packing time is not all spare labour: unloading, sanitation, maintenance, quality checks, selling and collection remain necessary.

Before deposits: confirm food-use permissions, written landed-cost offers, buyer price and credit terms, installed equipment performance and a non-negative replenishment calendar. Conduct a leak/weight acceptance trial with both pack sizes. Detailed supplier negotiations and commercial cash schedules remain withheld; this excerpt is not the complete execution dossier.

END OF SELECTED ANALYSIS

This portfolio preview intentionally ends here.

Detailed supplier calculations, commercial schedules and cash ledgers are excluded from this edition.

Illustrations explain the concept; engineering and equipment details require measured drawings and supplier confirmation.

No funding, operating profit or licensing outcome is guaranteed.

Discuss your project with Dr. Hassan El Hellani.