

PLANET STEAM

RULES OF PLAY

1601



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PLANET STEAM

A game for 2-5 players ages 12 and up. Game length: 90-120 minutes.

Welcome, dear Imperialists! The year is 2415. The Interplanetary Federation (IPF) has made tremendous progress over the past few centuries. All necessary preparations for settling the earth-like planet "Steam" have now been completed. The planet's gas core is a superheated 6500°C hot source of a variety of resources, including water. It took more than a quarter century just to complete work at the first drilling field: 42 shafts, sunk from the planet's surface deep into its interior.

But now, it's finally time – steam billows out of each shaft as a base source for the mining of resources. To use this steam, let alone turn a profit with it, platforms must first be built over the shafts. Later, the first tanks for water storage can be built on the platforms. With the help of tank upgrades, other resources such as energy, ore and quartz can be produced. Resources are important – you'll need them to expand your Steam Empire. You'll also need ever-larger carriers to transport your resources. Buy and sell resources as advantageously as possible at the Trading Terminal, since credits – that is, money on Planet Steam – is as scarce here as it is on Earth.

To support you, the IPF has made several specialists available. Of course, the specialist of your choice won't come cheap.

At the end of the game, the winner is the player who, through cunning tactics and timely trading, has accumulated the most credits.

GAME COMPONENTS

72 platforms: 12 in each of 5 player colors as well as 12 neutral platforms.

Tanks and tank upgrades:

37 tanks

15 quartz upgrades (black)

15 ore upgrades (grey)

15 energy upgrades (white)

14 compressor domes (brown)

Resources:

30 water (transparent crystals), both small and large

30 quartz (black crystals), both small and large

30 energy (white wooden cylinders), both thin and thick

30 ore (grey wooden cubes), both small and large

For all resources, the smaller pieces represent 1 resource and the larger pieces represent 5 resources.

50 cards, including 40 carriers and 10 specialist cards

10 summary cards, 5 each for phases and costs

Game money

14 certificates, including 7 building licenses (silver colored) and 7 deeds of ownership (gold colored)

1 large game board

1 die (D6)

1 year marker

4 trading markers

1 game rules

1 rules summary (on the back page of these rules)

1 setup guide

Note to the reader:

Where the IPF is mentioned in the rules, this always refers to the general supply – that is, the bank.

GAME SETUP

Before the first game:

You will need to put together one energy coupler. This unit consists of a tank, a compressor dome as well as one of each tank upgrade. Glue these five pieces together.



BEFORE EACH GAME:

For the following preparations, please make sure you have the setup guide (component description and game setup) at hand!

Place the game board in the middle of the table. Place the energy coupler nearby.

Place the year marker (circular marker with a picture of a head) on the year (game round) marker space on the board appropriate for the number of players (5 players: 4 years / 4 players: 5 years / 3 players: 6 years / 2 players: 7 years).

Place the die onto the small space in the bottom right of the game board.

The Production Hall has spaces where tanks are produced. Take one tank from the supply and place it on a tank production space – it will act as a tank supply indicator. Place the tank on space 9 with 2 players, space 10 with 3 players, space 12 with 4 players or space 14 with 5 players (see also Table 1 below). The red numbers on the appropriate spaces serve as a guide.

If you prefer, you can immediately put all of the available tanks onto the tank production spaces – that is, 9 tanks with 2 players, 10 tanks with 3 players. etc. However, you might not have enough tanks to do this for the final round of the game – in which case one tank would have to serve as a supply indicator again.

Place all remaining tanks next to the game board.

You won't need all 10 specialist cards, only a single lettered set that depends on how many players there are:

2 players = Card set A (2 specialist cards),

3 players = Card set B (3 specialist cards),

4 players = Card set C (4 specialist cards),

5 players = Card set D (5 specialist cards).

Place the necessary specialist cards face-up next to the game board.

Any remaining specialist cards are not used in the game and are returned to the box.

Note: Several specialist cards have more than one letter on them and are used in each of the corresponding card sets!



The Trading Terminal (hereafter referred simply as the "Terminal") is made up of two tables. Each table has 4 columns. The left-hand table is the price table and indicates resource costs. At the start of the game, place one small piece of each resource type onto the red (starting) space of each column. These will serve as price indicators.

The smaller table (to the right) is the supply table and indicates how many of each of the four resources are available in the Terminal. Each resource's starting supply depends on the number of players (see Table 1 below). Place one small piece of each resource type onto the corresponding numbers. These will serve as supply indicators.

Sort the remaining resources according to type and place them onto the four matching spaces on the game board. Directly below these spaces are those for the tank upgrades and compressor domes. Finally, there is a space for certificates towards the bottom of the Terminal. Place the number of certificates listed in Table 1 (building licenses and deeds of ownership) onto that space. Any remaining certificates are not used and are returned to the box.

Choose one player to act as IPF representative. That player will be responsible for carrying out all IPF transactions (relating to credits, resources, tank upgrades, compressor domes and certificates) during the game.

TABLE 1:

# Players	2	3	4	5
Tanks - Production Hall	9	10	12	14
Water supply	6	7	8	10
Energy supply	10	12	14	16
Ore supply	7	8	9	10
Quartz supply	4	5	6	7
Building licenses	6	6	7	7
Deeds of ownership	4	5	6	7
Specialist card (set)	A	B	C	D



Give each player:

(1) One phase summary card and one cost summary card.

(2) 4 class 1 carriers, including one carrier for each resource type (i.e. 1 water carrier, 1 energy carrier, 1 ore carrier and 1 quartz carrier). Each player may immediately upgrade one of their 4 carriers to class 2 (by turning it over). Place all remaining carriers next to the game board.

(3) Starting resources. The number of resources players receive depends on the number of players. Each player places their resources onto their carriers – ore onto the ore carrier, quartz onto the quartz carrier, etc. The number of resources as well as the money (credits) that each player receives are shown on table 2 below.

TABLE 2

	Abbr.	2 players	3 players	4 players	5 players
Credits	C\$	100	110	120	130
Water	W	3	4	3	3
Energy	E	3	2	3	4
Ore	O	1	2	2	2
Quartz	Q	0	0	1	1

Sort the remaining credits according to value and place them near the player previously elected as IPF representative.

(4) All platforms of their color as a personal supply.

Finally, complete the initial platform setup on the board as shown in the figures below. There is a different starting setup depending on the number of players.

When playing with only 2 or 3 players, several shaft spaces on the board are covered up. To accomplish this, place platforms of an unused color onto the shafts, face-down. With 3 players, the first, topmost row of 7 shafts is covered up, while with 2 players the second row (i.e. a total of 2 rows of 7 shafts each) is covered up as well. Shafts covered in this manner are unavailable for the duration of the game and cannot be used!

Setup for 2 players



Setup for 3 players



Setup for 4 players



Setup for 5 players



Any remaining unused platforms are returned to the box.

GAMEPLAY

The game takes place over a series of years (rounds). Each year consists of 4 phases, which are carried out by all players in order (player order is determined by the specialist cards auctioned off at the start of Phase A). The individual actions listed for each phase and marked with a "*" must be carried out in the order indicated. Those actions in Phase B (Buying Phase) not marked with this symbol are an exception and may be carried out in any order.

Summary of Phases in a Year

- A. Expansion Phase:**
- * Auction specialist cards (+ receive bonus resource) (starting player begins)
 - * Auction off a shaft (shaft chosen by the Venturer)
 - * Cover up shaft on the board (use building license or the die)
 - * Place the energy coupler (Location chosen by the Fireman)
- B. Buying Phase:**
- * Pay activation cost (1 water)
 - Buy tanks, upgrades, compressor domes, carriers
 - Freely rearrange tanks, upgrades, compressor domes.
- C. Production Phase:**
- * Produce resources (in fixed order)
 - * Resource Trading (at the Terminal)
 - * Certificate Trading
- D Year-End Phase:**
- Produce new tanks (at the Production Hall)
 - Return specialist cards + energy coupler
 - Move year marker one space forwards

The game ends after the year marker leaves the track (after 4 years with 5 players / after 5 years with 4 players / after 6 years with 3 players / after 7 years with 2 players).

Summary of Specialist cards

The numbers on the specialist cards define the player order for a given year. Additionally, each specialist card depicts a different specialist. The specialists have special privileges that come into play at varying points of the game. The following is a list of all specialist cards used in a 5-player game:

Specialist name	Specialist privilege
Lady Steam	Start player
The Venturer	Auction off a shaft (50% discount for own purchase)
The Fireman	Connect the energy coupler
The Engineer	Free building license or receives 15 credits.
The IPF Agent	Free resource or free carrier upgrade

In a 2 or 3-player game, specialist cards with 2 specialists per card are used. On these cards, the two specialists act as a team and both privileges can be used in the appropriate phases.

Lady Steam – Start player for each phase

Lady Steam always gets to act first. This is a very important privilege as it lets that player choose the best shafts, buy tanks at the best rate and start each trading phase. They may also place the first trading marker (expert rules only).



The Venturer – Auction off a shaft

The Venturer must choose an empty (unoccupied) shaft on the board and auction it off among all players (including himself). If the Venturer buys the shaft himself, then he only has to pay half his bid, rounded down. He must choose a neutral platform to auction off instead should there be no more empty shafts.



The Fireman – Connect energy coupler

The Fireman controls the energy coupler this round. He takes the energy coupler from the game board and places it onto the specialist card. On his turn in Phase A, he chooses which shaft row will receive bonus production from the energy coupler.



The Engineer – Free building license or receives 15 credits

The Engineer may immediately take a building license from the Terminal. Building licenses allow the takeover of neutral building platforms or replace the die roll when choosing a shaft in Phase A. Should he choose not to take the building license (or should the building licenses have run out), then he receives 15 credits from the IPF instead.



The IPF Agent – Free resource or free carrier upgrade

The IPF Agent is only available in a 5-player game. He may immediately take one resource of his choice from the IPF supply (the supply indicator is not adjusted) and load it onto the appropriate carrier. Should he choose not to take the resource, then he may upgrade one of his carriers to the next-higher class instead.



THE GAME BEGINS:

EXPANSION PHASE A

Set up bonus resources

Take one each of water, ore, quartz and energy from the general (IPF) supply and place them onto the four oval spaces at the top of the Terminal. These are the bonus resources available during the specialist card auction. Reduce each of the corresponding supply indicators in the Terminal by one. Should a resource's supply indicator already be reduced to 0, then no bonus resource of that type is available and its bonus space stays empty. That resource's supply indicator remains unchanged.

Auction specialist cards

Player order is determined each year by auctioning off the specialist cards. This is accomplished by carrying out a series of bidding rounds, each of which ends with the high bidder taking one of the available specialist cards along with a bonus resource. Auctions continue until each player has a specialist card. Once a player has a specialist card he does not take part in further auctions.

Any player with no credits at the beginning of the specialist card auctions receives a 2 credit subsidy from the IPF. Players must always be able to pay the full amount of their bids.

Auctioning a specialist card:

At the start of the game, determine a start player (by rolling the die, for example). In subsequent years, the bidding will start with the start player from the previous year. This player opens the bidding, which then continues in clockwise order. The opening bid must always be at least 1 credit (forced bid). On your turn, you can either bid a higher whole number or pass; once you've passed you can't bid again until the next auction. Bidding continues until all players but one have passed. That player pays his bid to the IPF and chooses one of the available specialist cards.

The start player continues to start the auctions until he wins an auction himself, after which the bidding starts with the next player on the left who has yet to win an auction. Auctions continue until all players have won one (and thus chosen a specialist card). Players who already have a specialist card can't bid again this year. The last player to take a specialist card simply pays 1 credit and takes the card, as there are no other bidders left.

Additional action: bonus resource

After winning an auction, you must immediately choose one of the remaining bonus resources at the Terminal (provided there are any left) and load it onto your corresponding carrier. The carrier's load capacity must be observed. If you don't have any room for the resource, then you must return it to the IPF supply and adjust the appropriate supply indicator up by one. If, at the end of the auctions, there is a bonus resource left over (which can occur in a 2 or 3-player game), then it is also returned to the IPF supply and the appropriate supply indicator adjusted up by one.

Immediate specialist actions

The Fireman: Immediately take possession of the energy coupler.

The Engineer: Immediately either take a building license from the Terminal or receive 15 credits instead.

The IPF Agent: Immediately either take a resource from the IPF supply (supply and price indicators remain unchanged) or upgrade a carrier to the next-higher class instead. Note that the carrier upgrade occurs before taking the bonus resource from the auction, potentially allowing it to be loaded.

The Venturer auctions a shaft

The Venturer must choose an empty (unoccupied) shaft on the board to auction off among all players (including himself). The auction is carried out in the same way as the specialist card auctions. The winning bidder pays his bid to the IPF and takes ownership of the auctioned shaft by covering it up with one of his platforms. If the Venturer wins the auction, then he only has to pay half his bid (rounded up) to the IPF.

If there aren't any more empty shafts, then the Venturer must choose a neutral platform to auction off instead. This platform is then treated like an empty shaft, with the winning bidder taking ownership of it by replacing the neutral platform with one of his own.

Specialist card auction example for 4 players:

1st bidding round: All four specialist cards are available at the start of the game. Martin is the start player and opens the bidding with a bid of 20 credits. Wolfgang, seated to his left, bids 22 credits. Helge, the third player, as well as Erika, the fourth player, both pass. It's Martin's turn again and he raises his bid to 23 credits. Wolfgang doesn't want to go any higher and passes. Since Helge and Erika have already passed in this auction, they can't bid any more. Martin's bid is the highest, so he wins the auction and pays 23 credits to the IPF. He looks over the four available specialist cards and chooses Lady Steam (card number 1). He puts the card in front of himself on the table and then chooses quartz as his bonus resource, placing it onto his quartz carrier.

2nd bidding round: Wolfgang starts the bidding for the next auction (as he's to the left of Martin), in which only he, Helge and Erika may take part. There are 3 specialist cards left for the winner to choose from. This round is won by Erika with a high bid of 15 credits and she chooses the Engineer (card number 4). She takes a building license (privilege of the Engineer) and chooses ore as her bonus resource (quartz is no longer available as a bonus).

3rd bidding round: Now, Wolfgang and Helge bid for the last 2 specialist cards as well as the last two bonus resources. Wolfgang would love to pass but can't as he must open the bidding with an opening bid of at least 1 Credit. Wolfgang bids 1 credit and Helge passes. Wolfgang pays the credit to the IPF and takes the Venturer (card number 2) along with water as his bonus resource. Helge then receives the last specialist card (the Fireman, card number 3) for a minimum payment of 1 credit along with the last bonus resource, energy. As the new controller of the Fireman he also takes the energy coupler, placing it onto his specialist card.

Cover up a shaft on the board

This action gives **each player** a chance, in specialist card order, to take ownership of a shaft by covering it up with one of their platforms. This is carried out either by rolling the die (which carries some risk of things not going as planned) or by using a building license instead. Players must decide ahead of time whether they want to roll the die or use a building license – they may not roll the die first and then decide to use a building license instead. Rolling the die allows only empty shafts to be covered up; using a building license also allows players to replace neutral platforms with their own.

Using the die:

Choose an empty (unoccupied) shaft on the board. Roll the die. If you roll a 4, 5 or 6, your plans are successful and you may cover the target shaft up with one of your platforms. If you roll a 1, 2 or 3, your plans didn't quite work out and you may cover up the next empty shaft out in any direction (vertically or horizontally) from your target shaft instead. This may be a neighboring shaft or may be one or more platforms away. If there aren't any other empty shafts for you to cover up, then you receive 15 credits from the IPF as consolation instead.

Example: Green wants to cover the space marked with 0 up with a platform. Unfortunately, he rolls a 1. He now has to choose one of the empty shafts marked with 1, 2 or 3 instead. The area to the right of his target shaft is filled up with 1 neutral platform and 2 red platforms and thus no longer available.



There are often no empty shafts left by the last round. In that case, choosing to roll the die to cover up a shaft is no longer allowed and players must either use a building license to replace a neutral platform or take no action.

Using a building license:

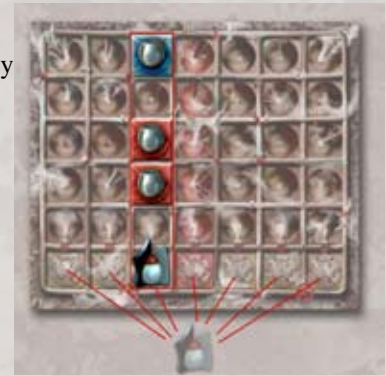
You can use a building license in one of two ways:

1. Cover an empty shaft up with one of your platforms without having to roll the die, or
2. Exchange a neutral platform for one of your own.

You don't need to control the Engineer to use a building license. You are allowed to own multiple building licenses but can only use one per turn. **Building licenses, once used, are removed from the game.**

Place the energy coupler

The Fireman places the energy coupler onto one of the seven possible locations (indicated in the figure) along the bottom row of the board (refer to setup guide). The energy coupler allows each tank in the vertical column above it to produce a bonus resource without requiring additional energy.



Example: Red controls the Fireman and places the energy coupler onto the location shown at right. Each tank in this column can produce bonus resource, including Blue's tank at the top of the column.

For more information, refer to Production Phase C (below).

BUYING PHASE B

Note: All actions in Buying Phase B are carried out completely by the active player before another player takes their turn.

Activation cost: A prerequisite for carrying actions out during this phase is the payment of 1 water to the IPF (see also costs summary card). Before doing anything else, you must take 1 water from your water carrier and return it to the IPF supply (do not adjust the water supply indicator). It is important that you don't forget to make this payment!

Emergency assistance: If, on your turn, A) your water carrier is empty and B) you don't own a water tank, then you must, in accordance with the IPF charter, immediately downgrade one of your tanks into a water tank. This is the one action you can carry out without having to pay the activation cost. You then receive 1 water from the IPF (without adjusting the water supply indicator) as emergency assistance and your turn for this phase is over.

Once you've paid the activation cost, you may carry out as many of the following actions as you wish:

(1) Buy tanks: You are allowed to buy as many tanks from the Production Hall as you can afford and can place onto your platforms. Each tank costs 1 water plus as many credits as indicated by the number to the right of the tank supply indicator. After each tank you buy, move the tank supply indicator one space down (i.e. 'bulk' purchases of multiple tanks at the same price are not allowed). If you buy the last available tank, then remove tank supply indicator from the Hall. You must immediately place the tanks you buy onto your platforms. **You are not allowed to place more than one tank per platform!**

(2) Buy tanks from earth: Each tank costs 1 water, 2 quartz and 5 credits. Do not adjust the tank supply indicator in the Production Hall. You must also immediately place the tanks you buy from earth onto your platforms.

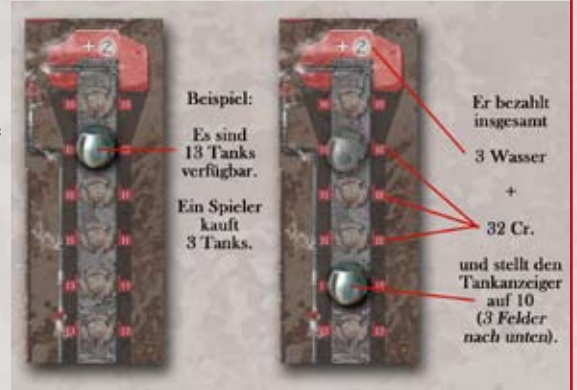
(3) Upgrade tanks: A basic tank produces water. However, you are allowed to upgrade the tanks you buy. Refer to the costs summary card for upgrade costs. With the appropriate upgrade, your tanks can produce energy, ore or quartz instead. You are allowed to upgrade both newly-bought tanks as well as ones already on the board.

(4) Reequip / rearrange tanks: This action allows you to buy new tank upgrades to replace existing ones. New upgrades must be paid for at full price (refer to costs summary card) – the existing upgrade doesn't give you a price discount. The existing upgrade must either be moved to a different tank or returned to the IPF as scrap – no tank may ever have more than one upgrade. This action also allows you to freely move tank upgrades from one tank to another. Finally, this action allows you to freely move your tanks from one of your platforms to another (remember that no more than one tank is allowed per platform).

(5) Buy compressor domes: A compressor dome increases a tank's production capacity by one. Each compressor dome costs 1 water, 1 ore and 2 quartz. Take the compressor dome from the IPF supply and place it onto one of your tanks. This action also allows you to freely move your compressor dome(s) from one tank to another to adjust production capacities. It doesn't matter what type of resource the tanks produce! No more than one compressor dome may be placed on a tank.

(6) Upgrade carriers: You can never own more than 4 carriers (one carrier for each resource type). At the start of the game, you have 3 class 1 carriers and 1 class 2 carrier at your disposal. Each of these carriers can be upgraded up to class 4. Each upgrade costs 1 ore and 1 energy per class level. class 2 carriers are found on the reverse side of class 1. For classes 3 and 4, take the appropriate cards from the card supply. You are allowed to skip classes, provided you pay the required ore and energy amount for each step to do so, as each class must be paid for. Each class upgrade increases your load capacity for that resource. If, over the course of the game, you exceed your load capacity, then the excess resources – for example, during Production Phase C – are lost. You are not allowed to try and store your excess resources in another carrier, be it yours or someone else's.

Note: Resources paid during Buying Phase B do not affect supply indicators in the Terminal.



PRODUCTION PHASE C

Produce resources

For a tank to produce, regardless of how many resources it will produce, it needs to be supplied with 1 energy!

The following exceptions do not require any energy for tank production:

1. Producing energy does not require energy.
2. All tanks producing water on the Head Shafts (marked with H) in the middle of the game board do not require energy.

First, calculate how much energy you will need to supply your tanks with. Count up all of your tanks not subject to the exceptions above – this is how much energy you will need to supply. You must pay this cost to the IPF (do not adjust the energy supply indicator) before producing resources.

Energy shortfall: Since new energy is only produced at the end of the production, you may not have enough energy to supply all of your tanks. Or, you may not want all of your tanks to produce this turn (to save energy, for example, or because you won't have enough room in your carriers). In either case, you can choose to supply only some of your tanks instead. In that case, you must immediately decide which of your tanks will not produce and reduce your energy costs accordingly.

Remember to always differentiate between Base Production and Bonus Production.

BASE PRODUCTION

Each tank without an upgrade produces 1 water.
Each tank with a white upgrade produces 1 energy.
Each tank with a grey upgrade produces 1 ore.
Each tank with a black upgrade produces 1 quartz.
The resources produced are taken from the IPF supply.

BONUS PRODUCTION (no additional energy required)

(1) Compressor Dome

The compressor dome increases the production capacity of the tank it is placed on by 1. This bonus production only occurs if the tank was supplied with energy during Base Production! (See next example)

(2) Synergy Effect

When your own tanks are **(a) located next to each other** (i.e. directly vertically or horizontally adjacent) and **(b) produce the same raw material**, they produce bonus resources. The number of bonus resources produced is always one fewer than the number of tanks involved. For example, two adjacent platforms with identical tanks on them will produce one bonus resource, three will produce two bonus resources, etc. Synergy effects do **NOT** apply to tanks owned by multiple players.

The synergy effect only applies if all tanks involved produced resources during Base Production!

After paying your energy costs and calculating your total bonus production, take all of the resources you produced from the IPF supply and load each resource type onto the appropriate carrier. If any of your carriers are full, return the excess resources to the IPF.

Note: Resources produced during Production Phase C do not affect supply indicators in the Terminal.

Example of bonus production from compressor dome and synergy effect:

Base Production of spaces 1 to 4:	4 resources
Compressor dome (CD) on space 4:	+1 resource
Synergy effect of spaces 1 to 4:	+3 resources (4 producing tanks - 1)
Result: Total of 8 resources produced at a cost of 4 energy (each tank requires 1 energy).	

Example of energy shortfall and reduced production:

Red only has 3 energy available. He decides to supply spaces 2, 3 and 4 with energy as this makes the best use of the synergy effect as well as his compressor dome.

Base Production of spaces 2 to 4:	3 resources
Compressor dome (CD) on space 4:	+1 resource
Synergy effect of spaces 2 to 4:	+2 resources (3 producing tanks - 1)
Result: Total of 6 resources produced at a cost of 3 energy.	



(3) Energy coupler

The energy coupler allows each tank in the vertical column above it to produce a bonus resource without requiring additional energy. However, this bonus production only occurs for each tank if it was supplied with energy during Base Production!

Example of ore production, energy costs, synergy effect and energy coupler:

Red has six platforms with ore tanks on them (1 through 6) that require 6 energy for production (1 energy per tank).

Base Production of spaces 1 to 6	6 resources
Synergy effect for spaces 1 to 4 (The tanks on spaces 5 and 6 are not adjacent to any tanks of the same colour and type and thus cannot take advantage of the synergy effect).	+3 resources (4 producing tanks - 1)
Energy coupler effect for spaces 1 to 3	+3 resources
Result: Total of 12 resources produced at a cost of 6 energy.	



Resource trading

Resources are traded in the order indicated by the numbers shown along the bottom of the price table: quartz, then ore, water and finally energy. For each resource, trading is carried out in specialist card order, starting with the start player (Lady Steam). Each player gets one turn to make a trade involving the current resource; after each player has had their turn trading for the next resource begins.

On your turn, you must choose whether you want to buy, sell, or not trade the current resource. After each transaction, even after not trading, the resource's price indicator is always adjusted.

Trading between players is not allowed.

Buying:

You are allowed to buy as many of the current resource as are currently available in the Terminal (see supply indicator). When you buy resources, pay an amount equal to that resource's current price (see price indicator) multiplied by the number of resources bought. Then, adjust the resource's supply indicator down by the number of resources bought. You can buy more resources than your carrier can hold (to drive the price up, for example), but you aren't allowed to store them elsewhere – the excess resources are simply returned to the IPF supply. Note that these returned resources do not affect the resource supply indicator. Once the resource's supply indicator reaches 0, no more of that resource can be bought.

Selling:

You are allowed to sell as many of the current resource as you currently own. When you sell resources, you receive payment equal to that resource's current price (see price indicator) multiplied by the number of resources sold. Then, adjust the resource's supply indicator up by the number of resources sold. You can keep selling a resource type even if that resource's supply indicator is at its maximum level. All resources sold are returned to the IPF supply.

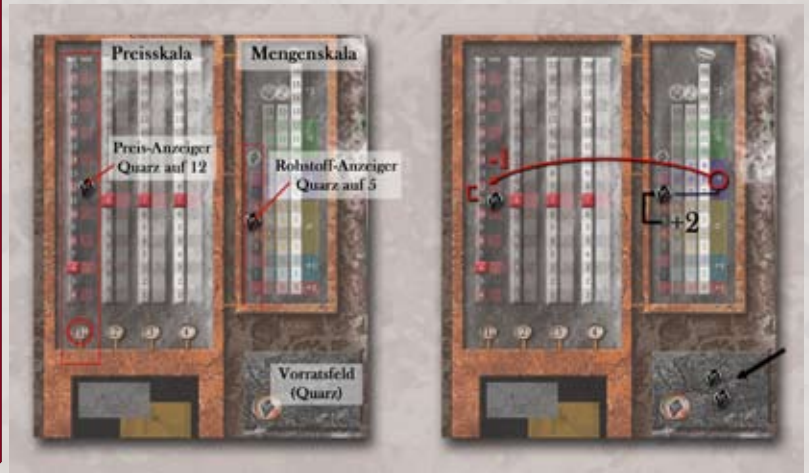
Important: In order of the specialist cards every player can either BUY, SELL or NOT TRADE for each resource. After every transaction, even after no trade, will follow a price calculation according to the supply indicator.

Price calculation:

The price change for the resource currently being traded is determined by how many of that resource are available in the Terminal (see supply indicator). The number of steps the price increases or decreases (or if it stays the same) is determined by the numbers along the right-hand edge of the supply table. The price never sinks below the resource's minimum price nor does it ever rise above the resource's maximum price. The price indicator for the current resource is always adjusted upwards or downwards immediately after each player's turn, even if that player chose not to trade. Thus, even a passive player can affect the resource's price.

Resource trading example:

Quartz is the first resource to be traded. The supply indicator for quartz is on 5. Martin (start player) decides to sell 2 quartz. The price is currently 12 credits, so he gets a total of 24 credits from the IPF for the sale. He adds the 2 quartz to the IPF supply and adjusts the quartz supply indicator upwards by 2 spaces. There are now 7 quartz in the Terminal, which lowers the quartz price by 1 step. The price that the next player, Wolfgang, can now buy or sell quartz at is 11 credits. Once all players have completed their quartz trades (including immediate adjustment of supply and price at the end of each turn), then the second resource, ore, will be traded. The first to trade ore will once again be Martin, the start player.



Hint: Players should choose a single person to make sure all price changes are made during trading, so as not to miss a price adjustment. It is especially important to make sure that price changes after players choose not to trade are made.

Certificate trading

After Resource Trading has been completed, each player may choose, in specialist card order, to carry out one of the actions listed below:

Buy building license

Pay 1 quartz + 2 water to the IPF and take 1 building license from the Terminal.

Sell building license

Sell 1 building license and receive 15 credits from the IPF. The sold building license is removed from the game.

Buy deed of ownership

Pay 1 quartz + 1 ore to the IPF and take 1 deed of ownership from the Terminal. Deeds of ownership are worth 50 credits each at the end of the game.

Note: Building licenses and deed of ownership quantities are limited and set at the start of the game.

IMPORTANT:

Supply indicators are only adjusted when ...

- (1) ... the bonus resources are taken,
- (2) ... resources are bought and sold during resource trading,
- (3) ... new tanks are produced during the Year-End Phase.

Price indicators are only adjusted when ...

- (1) ... raw materials are bought, sold or not traded during resource trading,
- (2) ... no new tanks are produced during the Year-End Phase due to resource scarcity.

YEAR-END PHASE D

New tanks for the Production Hall

The Production Hall automatically produces new tanks. The number of new tanks produced depends on the resource supply in the Terminal. For each 1 ore + 1 energy, 1 new tank is produced. As many tanks are produced as needed to reach the Production Hall's maximum capacity of 14 or until the necessary resources are used up. The ore and energy supply indicators are adjusted to reflect the resources used but their price indicators remain unchanged.

Tank production example: There are 5 ore and 9 energy in the Terminal. Five tanks will be produced, reducing ore and energy supply by 5 each.

Second Example: The resource supply are the same as above. There are still 11 tanks in the Production Hall. Only 3 new tanks will be produced, reducing ore and energy supply by 3 each.

Price increase of ore/energy due to resource scarcity

If **no tanks** can be produced because the supply indicator for one or both of the necessary resources is at 0, then the price indicator for each missing resource (potentially for both missing resources) is immediately moved upwards 4 steps in the Terminal.

Example: There are 9 energy but 0 ore in the Terminal. No tanks can be produced as the ore supply has run out. The price of ore is immediately increased by 4 steps. The price of energy remains unchanged.

Additional year-end actions

- (1) Move the year marker ahead one year.
- (2) Players return their specialist cards.
- (3) Remove the energy coupler from the board and put it back onto the Fireman.

The previous start player replenishes the bonus resources (adjusting the supply table accordingly) and starts the specialist card auction, thus starting the Expansion Phase of the new year.

GAME END AND SCORING

The game ends as soon as the year marker leaves the board (after 4 years with 5 players, 5 years with 4 players, 6 years with 3 players and 7 years with 2 players). The last year is played through in its entirety, including the Year-End Phase (which means that ore or energy prices can still potentially increase by 4 steps if tank production is not possible).

Now, scoring takes place. To determine their final score, players add up the total value of their holdings. The following items are worth credits at the end of the game:

Resources in carriers	? credits per resource (value depends on current prices in the Terminal)
Platform with tank	50 credits / platform
Platform without tank	25 credits / platform
Compressor dome	50 credits / compressor dome
Deed of ownership	50 credits / deed of ownership

Finally, players add their cash holdings to their totals as well.

Unused building licenses, carriers and tank upgrades are worthless at the end of the game.

The player with the most credits is the winner and, as a reward, may act as the IPF representative in the next game – congratulations! In the event of a tie, there are multiple winners.

PLANET STEAM FOR EXPERTS

We recommend using the following advanced rules variants only after all players are familiar with the game.

All advanced rules variants are independent of each other and may be added (or not) as you prefer. If you like, you can start by including only 1 or 2 new rules.

NOTE: The length of the game will increase by about 30 minutes if all advanced rules variants are used.

GAME SETUP

Reduced starting resources

Table 2 is replaced with the one below. Instead of the base quantities, give each player:

	Abbr.	2 players	3 players	4 players	5 players
Credits	CS	80	90	100	110
Water	W	2	3	3	3
Energy	E	3	2	3	3
Ore	Ore	0	1	1	1
Quartz	Q	0	0	0	0

EXPANSION PHASE A

Advanced platform setup

Do not use the starting platform setups shown in the base game rules – the game board should be empty at the start of the game. Instead, a one-time advanced platform setup action occurs during the Expansion Phase of the first year. During this action, each player, in specialist card order, will have a chance to place their platforms as well as neutral ones onto the board. Advanced platform setup occurs immediately after the specialist card auctions have been completed.

Before starting platform setup, players must decide how many neutral platforms will be placed on the head shaft spaces. **NOTE:** The more head shaft spaces are covered by neutral platforms, the harder the game will be initially. First, block off 1 or 2 rows of the game board (for 3 or 2 player games, respectively) with upside-down platforms in unused player colors, as usual. Give each player 2 neutral platforms. In games with fewer than 5 players, give the start player 4 neutral platforms instead.

Then, starting with the start player and continuing in specialist card order, each player now covers two empty shafts up: one with one of their own platforms and one with a neutral platform. In games with fewer than 5 players, the start player places an extra neutral platform as well.

Finally, starting with the last player and continuing in reverse specialist card order, each player covers an additional two empty shafts up, again with one of their own platforms and one neutral platform. As before, the start player places an extra neutral platform in games with fewer than 5 players.

Once advanced platform setup is completed, the game continues as usual.

Trading Markers

This variant uses the four trading markers – make sure they are next to the game board. The markers replace the pre-printed trading order in the Terminal, allowing players to specify the order in which resources are traded during resource trading.

When you win a specialist card auction, you also get to choose one of the available trading markers. Immediately place the marker onto any unoccupied marker space along the bottom of the price table in the Terminal (the pre-printed values on these spaces are now irrelevant). The trading marker now defines when the corresponding resource will be traded. A trading marker, once placed, may not be moved until the associated resource has been traded during resource trading.

In a 2-player game, you immediately place 2 trading markers instead. In a 3-player game, place the leftover trading marker onto the last empty space. In a 5-player game, the last player won't get a chance to place a trading marker.

BUYING PHASE

Fixed tank placement

Tanks, once placed, may not be moved any more. However, tank upgrades may still be freely moved from one tank to another, as before.

PRODUCTION PHASE C

Example of specialist card auction with trading markers for four players:

1st bidding round: Martin bids the most and wins the auction. He chooses Lady Steam (card number 1) and places it in front of himself. He also chooses quartz as his bonus resource, placing it in his quartz carrier. Finally, he takes trading marker 4 and adds it to the bottom of the water column in the Terminal. Water will be the last resource traded this year.

2nd bidding round: Erika wins this round and chooses the Engineer (card number 4). She chooses to take a building license (Engineer's privilege) and takes ore as her bonus resource. Finally, she takes trading marker 1 and adds it to the quartz column. Quartz will be the first resource traded this year.

3rd bidding round: Wolfgang and Helge bid for the last two specialist cards. Helge wins the auction and chooses the Venturer (card number 2) as well as a bonus water. He then adds trading marker 3 to the ore column. Wolfgang pays the 1 Credit minimum bid and takes the last specialist card, the Fireman (card number 3), along with the energy coupler. He also receives the last bonus resource, energy, and adds the last trading marker (number 2) and adds it to the energy column.

Resource trading

Resources are traded in the order defined by the four trading markers. Otherwise, resource trading is carried out in the same manner as in the base game. Once trading for a resource is completed, the trading marker for that resource is removed from the board and set aside for the next year.

Production limits on head shafts:

Only water and energy may be produced along the head shafts (middle row of shafts, marked with H). Ore and quartz tanks may not be placed there. This means that the synergy effect cannot span the middle shafts during ore or quartz production!

Costs Summary: Description

The diagram illustrates the costs summary for the production phase. It shows a game board with columns for Water, Energy, Ore, and Crystal. A 'COST' column is on the left, and a 'Credits' column is on the right. A 'Final settlement' table is at the bottom right. Red arrows point from text labels to specific elements on the board and table.

Labels and their corresponding elements:

- Activation cost in the Buying Phase Cost: 1 water** - points to the Water column.
- Paid for with resources and/or with credits** - points to the COST and Credits columns.
- Special Summary** - points to the Specialist Cards (Lady Steam, Fireman, Venturer, Engineer, OPE-Agent).
- Compressor Dome** - points to the Compressor Dome icon.
- Tank from earth Tank** - points to the Tank icon.
- Carrier** - points to the Carrier icon.
- Certificates** - points to the Certificates icon.
- Tank Upgrades** - points to the Tank Upgrades icon.
- Energy Costs (Production Phase)** - points to the Energy Costs icon.
- During Year-End: Production Hall produces new tanks (Cost per tank: 1 energy + 1 ore from the Terminal supply table)** - points to the Production Hall icon.
- Add up credits at game end** - points to the Final settlement table.

Resource	Water	Energy	Ore	Crystal	Credits
Water	2	2	2	2	2
Energy					
Ore					
Crystal					
Credits	?	5	-	-	2 5 8

Final settlement	
Platform with Tank	50 Cr.
Empty Platform	25 Cr.
Compressor Dome	50 Cr.
Building License	50 Cr.
Resources in Carrier	7 Cr.
Credits in cash	? Cr.

CREDITS

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The author and publisher thank all playtesters and people who helped create this game. In particular: the Hippodice Game Club, all players at AllGames4you, Malte and Helge Thiemann, Wolfgang and Erika Fleiter, Martin Götz, Harald Bilz, Heiko Eller, Oliver Erhardt, Heribert Bertram, Michal Scharf, Jürgen Kiesheyer, Karin and Mathias Michels, Oliver Warzecha, Claudia and Uwe Dinglinger, as well as Uwe Rosenberg, Basti and many more.

For questions, replacement parts, etc. please email us directly at:

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HELMET: SUPERSTRONG BUT NOT RUST-PROOF. MADE OF 60 ORE AND IRON, 12.8 QUARTZ, 0.2 WATER AND 27 ORGANIC COMPOUNDS.

LOUPE: MADE OF STEAMOLY-CRYSTAL, SCRATCH-PROOF, MIRROR-FREE, INDESTRUCTIBLE! REQUIRED FOR QUALITY CONTROL OF QUARTZ AND ENERGY PRODUCTION.

HEADSET: ALLOWS FOR HIGH-QUALITY, WIRELESS S-BAND COMMUNICATIONS ACROSS THE QUANTIZED REGIONS OF PLANET STEAM. USEFUL FOR COMMUNICATING WITH OTHER SPECIALISTS.

STEAM SPIDER: HIGH-SENSITIVITY TOOL FOR MEASURING STEAM TEMPERATURE, PRESSURE AND HUMIDITY. UNACCEPTABLE FLUCTUATIONS ARE REPORTED TO THE WEARER VIA ARM AND SHOULDER WOUNDS.

WRISTBAND: HIGH-QUALITY CONSTRUCTION EMPLOYING GENUINE RUBY LASER TECHNOLOGY. ALTHOUGH SUCH RADIATION CAN BE FATAL, LADY STEAM USES HER ARMBAND ALMOST EXCLUSIVELY FOR CREATING ESPECIALLY BEAUTIFUL LIGHT SHOWS.

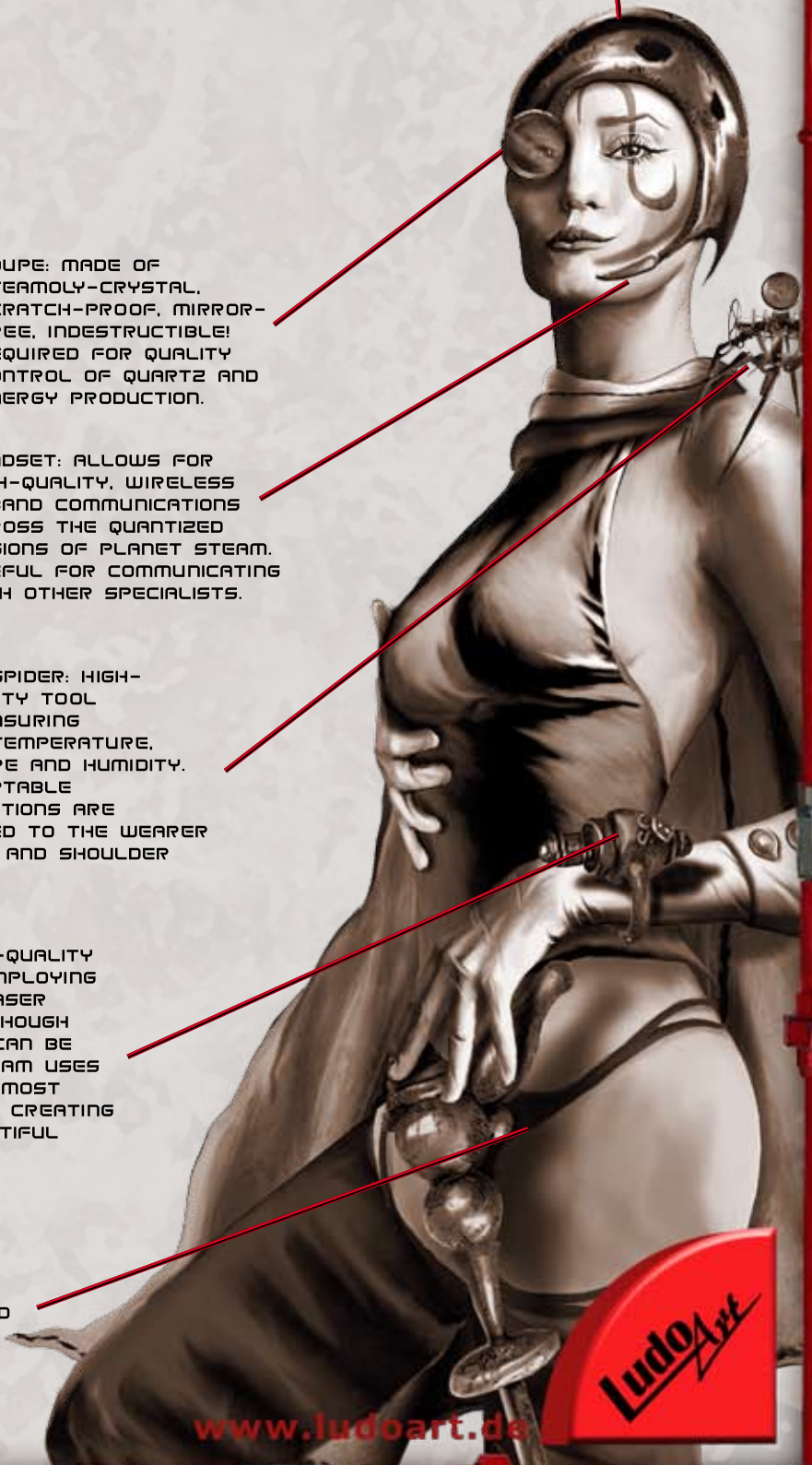
TURBO-TANGA: MADE BY AMBERCRUMBLE AND FINCH. CURRENTLY OUT OF STOCK BUT EXPECTED TO BE AVAILABLE IN ALL MAJOR EARTH METROPOLISES BY 2418.



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GAME RULES SUMMARY (WITHOUT ADVANCED VARIANTS)

A. EXPANSION PHASE

* **Specialist card auction:** The opening bid must be at least 1 credit. Players without credits to start the auction receive 2 credits from the IPF. The high bidder pays his bid and chooses an available specialist card as well as a bonus resource.

The following actions occur as soon as the respective specialist card is chosen:

The Fireman: Takes the energy coupler.

The Engineer: Takes a building license from the Terminal or 15 credits from the IPF.

The IPF Agent: Takes a resource from the IPF supply or upgrades one carrier by 1 class.

* **The Venturer:** Chooses an open shaft to auction or, if no shaft is available, a neutral platform to auction instead. Pays half the bid (rounded up) if he wins the auction himself.

* **Choose an open shaft:** Each player can either ...

... roll the die for an empty shaft (4-6 claims the target shaft, 1-3 claims the next empty shaft in the same row or column, if no such shaft is available the player receives 15 credits from the IPF).

... or use a building license (claim ownership of an empty shaft or neutral platform)

* **Place the energy coupler** (by the Fireman).

B. BUYING PHASE

* **Activation cost of 1 water** (must be paid immediately!).

Emergency assistance: If a player has no water, then he must change one tank into a water tank and receives 1 water from the IPF. Buying Phase for that player is over.

In player order, players may carry out any of the following actions (see also costs summary table for costs):

1. Buy tank(s): Cost ? credits + 1 water per tank
2. Buy tank(s) from earth: Cost 5 credits + 1 water + 2 quartz
3. Upgrade tank(s): Water = 0 credits, energy = 2 credits, ore = 5 credits, quartz = 8 credits
4. Reequip/rearrange tanks: Replacement upgrade costs as above, rearranging upgrades / tanks is free
5. Buy compressor dome: Cost 1 water + 1 ore + 2 quartz
6. Upgrade carrier: Cost 1 ore + 1 energy per class, max. class 4

C PRODUCTION PHASE

* Production

Each tank produces one resource (type depends on tank type), however requires supply of 1 energy.

Exceptions for energy requirement:

1. Energy tank
2. All water tanks on the head shafts (marked with H in the middle of the board)

Bonus Production of same resource (no additional energy required)

1. Compressor dome = 1 bonus resource
2. Synergy effect: Horizontally and vertically adjacent tanks of the same type owned by the same player produce bonus resources. Formula: # tanks - 1.
3. Energy coupler: Each tank in the same column as the energy coupler produces one bonus resource.

* **Resource trading:** Resources traded in indicated order from 1 to 4.

Whenever a player's turn is over, the resource price indicator in the price table is updated by 0, +1, +2, -1, -2, -3 depending on the available supply of that resource (see supply table). VERY IMPORTANT: A supply/price check and eventual adjustment is made even if the player did not trade.

* **Certificate trading:** Each player may choose one of the following actions:

1. Buy building license: Cost 1 quartz + 2 water
2. Buy deed of ownership: Cost 1 quartz + 1 ore (worth 50 credits at game end)
3. Sell building license: Receive 15 credits (building license removed from game)

D YEAR-END PHASE

Tanks are produced in the Production Hall. For each 1 ore + 1 energy, 1 tank is produced (maximum 14 in the hall).

Resources used for tank production affect resource supply in the Terminal.

If ore or energy are not present, then no tanks are produced. An immediate price adjustment of +4 steps is made to the price indicator of each missing resource type!

Advance year marker. Return specialist cards and put energy coupler back onto the Fireman.

The game ends when the year marker leaves the table. The last year is played to completion, including Year-End Phase (to allow for potential increase in ore or energy prices due to no tank production).

SCORING

To determine their final score, players add up the total value of their holdings. The following items are worth credits at the end of the game:

Resources in carriers	? credits per resource (value depends on current prices in the Terminal)
Platform with tank	50 credits / platform
Platform without tank	25 credits / platform
Compressor dome	50 credits / compressor dome
Deed of ownership	50 credits / deed of ownership

Finally, players add their cash holdings to their totals as well.

Unused building licenses, carriers and tank upgrades are worthless at the end of the game.

The player with the most credits wins the game.