

# "Whiteness 70~Just The Right"

Edited by Office Chonai-kai

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## Foreword

Run cooperative collection vehicles through business districts and make the sorting and collecting of used office paper, which until then hadn't been touched, spread throughout society and take hold.

The fact that this concept for Office Chonai-kai was born at the Tokyo Electric Power Company ,Incorporated (TEPCO) was influenced, I think, by the electricity industry's long history of recycling.

The electricity industry has always had deep ties to recycling. The power lines through which electricity is delivered to customers have always been removed and the old lines sent to recycling to be renewed. In recent years the electricity industry has consistently put efforts into recycling, through such things as storing the heat given off by underground cables and rivers by means of a system called "heat pumps" and using it to supply heat to an area. In order to further advance such recycling efforts on the part of the electricity industry and to fulfill its role in society as a public utility, in February of 1991 a directive entitled "Plan of Action Towards a Recycling Society" was issued under President Shoh Nasu (he is now a Senior Corporate Adviser).

It is my belief that the inauguration of Office Chonai-kai was the product of a combination of this sort of management policy and us at the Secretariat of Office Chonai-kai taking on the challenge.

The activities of Office Chonai-kai, which have been contributing to establishing the recycling of used paper in society, are now in their eleventh year. As I look back on the advice and support given Office Chonai-kai by various people in the past ten years I am once again filled with a feeling of gratitude.

I would foremost like to express my heartfelt respect for our member businesses and our member trash collection companies for their cooperation. These people have overcome the boundaries of company and business type to actively participate in the cooperative collection of used office paper, a new type of activity that makes a contribution to society. Office Chonai-kai has grown to the point where we are a network linking the 1,111 offices of our member businesses with our 46 collection companies members.

With the understanding and support of Mr. Muraoka, its 1997 president, the Japan Junior Chamber has given us its strong cooperation. Mr. Muraoka and the members of the Junior Chamber joined our recycling efforts with their "Mottainai Movement." We, who had been told by Senior Corporate Advisor Nasu that "mottainai" ("don't waste things" in English) was at the root of recycling, have felt a big connection with the Japan Junior Chamber who have the same way of thinking as well as activities in common with Office Chonai-kai.

The recycling of paper is completed by the collection of used paper and the use of recycled paper, which are like the two wheels that drive it. The market, however, was heading in the direction of "too much whiteness" and the broadening use of recycled paper had hit a wall. Volunteer activities aimed at propagating recycled copy paper of "adequate whiteness" have grown in number under the joint auspices of Office Chonai-kai and the Junior Chamber, and are now working on the recycling market; the time has come to pass the baton to the paper manufacturers, for whom paper is the main business, and to the supplier side.

There were times when despite of difficulties we faced we could proceed only because we received the wisdom and courage from superiors with a wealth of experience and considerable. This was true when we obtained the true trust of the collection industry. It was also the case when we were feeling our way with activities propagating recycled copy paper. Starting with Prof. Katsumi Yorimoto of Waseda University, who pulled us along as chairman of the "Whiteness Awareness Reform Project," Office Chonai-kai has been blessed with many benefactors.

The idea to start neighborhood associations in business districts. No compromise for the financial viability for it to sustain itself. Going up against the "excessive devotion to pure white." Partnerships that broadened our activities. I will be happy if the ideas and actions of Office Chonai-kai and those who have lent it support can be of some service to those who are grappling with recycling and with environmental issues, and I will also be happy if those ideas and actions can serve as points of reference when undertaking some new venture in these difficult times.

## Eiju Hangai

Director, Secretariat of Office Chonai-kai

# I. Starting "Neighborhood Associations" for Business Districts

The person with whom I was trying to find a new way of doing things suddenly died just as we were getting started. Mr. Shigejiro Arai, the president of the Arai Company (a used paper wholesaler) had a big influence on me in the realization of the communal used paper collection system called Office Chonai-kai (in English, "office neighborhood associations in Tokyo"). He died in March of 1991, just as the preparations for the pilot operations of "Office Chonai-kai" had been finalized, six months after we had first met. Mr. Arai was 74, I was 37. He was old enough to be my father, but we really agreed on the subject of cooperative collection of used office paper. There was no one with more enthusiasm than Mr. Arai for the startup of this new experiment called the "Office Chonai-kai system." If he were still alive today I wonder what he would think about the ten years that Office Chonai-kai has been operating.

## 1. Meeting Our Partners

The Origins of the Office Chonai-kai initiative

Tokyo Electric Power Company, Incorporated (TEPCO), where I work, first started sorting and collecting its used paper in April of 1990, at a time when offices begun to experiment with this to reduce the volume of used paper and make it more collectable. The results after about a half a year of this were encouraging enough, in terms of recycling volume and cost, to bring about the next development, but the plans for after that were still being explored. From the beginning we had aimed at making a contribution by means expanding into society the practice of sorting and collecting used office paper, and having it become well established. The big issue was how to make this a reality. For a while we contemplated networking the 50 TEPCO offices that are scattered across 23 Tokyo wards. A desktop simulation, however, made it clear that traffic congestion would be severe and that, from a cost standpoint, the transport costs would amount to a huge outlay.

That being the case, if we were to break down the barriers between companies and route cooperative collecting vehicles through the neighboring business districts, then the sorting and collecting circles could spread... That sort of shift in thinking was the spark for "Office Chonai-kai."

At the beginning of October of that year a certain business magazine gave some coverage to the Office Chonai-kai concept. The same magazine had also covered Mr. Arai in an article on the used paper collecting business. We were both surprised to see that we had both mentioned the same concept in the magazine even though we were total strangers.

### The Office Chonai-kai Concept.

o In spite of the fact that in the wards of Tokyo there are so many office buildings that it could be described as "the mother lode of used office paper", Tokyo is hampered by traffic congestion and difficulty in securing collection points. For a single building by itself, the collection costs alone, such as the cartage fee charged by collectors, will frequently fail the economies of scale.

o Therefore we took neighborhoods as the entities, and had the office buildings within them cooperate, share their used paper sorting know-how and run regularly scheduled collection. This would give rise to economies of scale with regard to both the volume and cartage costs, and make a contribution by expanding and firmly establishing into society the previously ignored practice of sorting and recycling used office paper.

o Particularly for those office buildings taking on the expense of recycling used paper for the first time, it is a structure wherein those costs will be set at a lower level than what the office buildings had been paying for waste management in the past, thereby also providing a cost incentive for the companies participating in the Office Chonai-kai system to continue their participation.

(See Figure-1) The Image of Office Chonai-Kai's cooperative Collection



At the time, this concept was nothing more than a newborn idea, totally unproven. There were some who were kind enough to think that the concept and the name "Office Chonai-kai" were interesting, but it was still at the planning stage. That being said, a half year had elapsed at TEPCO since it had first started sorting and collecting at the head office, so we had a head start in finding the solutions to the problem points of sorting and collecting used office paper, which was something that no one had attempted in earnest up until then.

At the same time, Mr. Arai's opinion as stated in the magazine was concise, "It is essential that there also be a cooperative business district collection route for used paper recyclers." His words greatly encouraged the Office Chonai-kai concept that was in its planning stage. This was, a powerful, though indirect, endorsement from the person considered to be the representative of the used paper collection business.

Just as my desire to meet him was growing stronger, I happened to get a telephone call from Mr. Arai himself. When he came by for a visit, the first words out of his mouth were "This 'Office Chonai-kai' is a concept that I want to work on with you, even if it is without pay. If the office side is working on it as hard as this, it makes those of us for whom collection is a business look silly for not having gone after this on our own initiative."

According to Mr. Arai, there was one issue the used paper collection industry had to be concerned about. At the time it was the midst of the bubble economy, and although manpower shortage was a big problem for all kinds of companies, the extent of it was particularly serious for the used paper collection industry. The market price for used paper was not growing with the indexes. For example, even if one had an heir, "I don't want to pass it on to my son" was a frequent statement. Soaring land costs were driving this trend. Used paper recyclers owned "collection yards," but they could sell them as land for apartment buildings. Mr. Arai's pressing worry was that if the status quo were permitted to remain, the function of collecting used paper that had been picking up stream would, even after so much effort, drop dramatically and recycling would lose momentum.

Cooperative collection of used office paper is not only significant for companies; it is also an effective undertaking to revitalize the used paper collection business.

### A Bridge Between the Offices and the Used Paper Collection Companies

One company that had come to observe used office paper collection at the head office of TEPCO told me the following. "In the past, a used paper recycler we were knew would come to buy used newspaper for several yen per kilogram. But with the bubble economy the price of used paper and collection costs offset each other and eventually we were forced to pay a part of the used paper collection company's collection costs. But even with that, the used paper collection company ultimately stopped coming because it ceased to make any business sense. As a consequence, since we couldn't stack up used office paper in expensive office space, we pay the municipal sanitation department 22.5 yen per kilogram (now it is 28.5 yen) to haul it away as trash."

By law, the costs of managing waste from offices are to be borne by the companies and there are specific fees that are set. This meant that used paper that people had gone to the trouble of recycling was now going to revert to trash, simply because of the large outlay in cost involved.

This tale, which corroborated Mr. Arai's worry, points out difficult problems that can't be unilaterally attributed to the used paper collection companies. It is not reasonable to expect a business to continue doing things a certain way when it is inconsistent with economic principles. Collecting used paper, which is the raw material for recycled paper, is an effective and practical use of natural resources and the volume of trash is reduced to that extent. But if it is not viable economically, we can't expect the used paper collection companies to continue to recycle used paper. I became convinced that as long as sorting and collecting used office paper was not done with a system that supported the used paper collection industry, it would not spread through society and become well established as hoped. When I met Mr. Arai became, it was a pivotal event for me. With his concern about the current state of the used paper collection business, and his passionate discussion of the new paths to take, I knew instinctively that Mr. Arai would be an invaluable partner in the pilot operations of Office Chonai-kai.

There already was a used paper wholesaler who took care of the collection for "Office Chonai-kai." In spite of this, my thinking that I wanted to build Office Chonai-kai with Mr. Arai grew day by day. I quickly asked the four people that I could always get straight advice from – Mr. Inaba and Mr. Harada of Fuji Xerox Office Supply Co., Ltd., and Mr. Hiromatsu and Mr. Sakakibara of Tokyo Electric Power Environmental Engineering Co., Inc. These were the friends with whom I learned the first steps of sorting and collecting used office paper. It was not easy to broach the subject of changing the existing practices, but I told them, "Please at least meet with Mr. Arai. With the addition of this man's experience and enthusiasm, 'Office Chonai-kai' will certainly be a success." I endorsed Mr. Arai as if he were my candidate running for office in an election.

The next time, it was me who called Mr. Arai. Mr. Arai brought along his son Katsuo, the Managing Director (now the president). Would Mr. Inaba, Mr. Harada, Mr. Hiromatsu, and Mr. Sakakibara be persuaded? He said, "This is the sort of thing that we should have been thinking about on our side before this. We should not be standing around doing nothing while you on the office side are thinking about it, should we?" The four were clearly enthralled by Mr. Arai's distinctive way of speaking. The fact that Mr. Arai had already advocated cooperative collection to the industry, that he was working toward implementing it locally in Adachi Ward in Tokyo, and his ability to take action all were impressive.

We strongly agreed to go ahead and establish Office Chonai-kai with all of us as partners. As to the used paper wholesaler that we had dealt with previously, he was an old friend of Mr. Arai's and he graciously said he understood when he was told the news.

## 2. From Concept To Pilot Operations

### With the Power of the Entire Secretariat

In order to test the Office Chonai-kai concept and develop cooperative collection for real, it was necessary to run a route between a number of office buildings and accumulate data for use in setting up anew Office Chonai-kai's management and a fee structure.

Office Chonai-kai is a system whereby, for the first time, the office buildings pay the collection costs of the used paper collection companies. Companies must be shown that the fee levels for Office ahonai-kai will be kept below the levels they previously paid for waste disposal, or they will not be persuaded to join "Office Chonai-kai." I met my partner Mr. Shigejiro Arai through sheer luck, but we would have to go out and find our office building partners on our own. We went out and recruited companies to join us in testing the Office Chonai-kai concept. We held a presentation on the test implementation of Office Chonai-kai in late October of 1990, the same month that I had first met with Mr. Arai, and the

turnout was higher than expected, with 35 companies showing up.

The day before the presentation, at shortly after 6 in the evening, we started the rehearsal in the large conference room on the third floor of the TEPCO head office. Displays such as boxes for sorting were readied in a corner of the room. All 7 members of the secretariat were there and paid close attention to how I explained things.

The companies that would be attending the next day would be deciding whether or not to participate in the Office Chonai-kai pilot operations, and I felt as though I was standing on the brink of something. The pressure was mounting.

I tortured myself, thinking, "Oh, they're just not going to get it." And every time I paused in my explanation, members of the secretariat would make more and more comments. "That's not like the Mr. Hangai we know! Speak more frankly. Tell them that you've been taking the sorting boxes to every TEPCO workplace, creating an awareness of sorting and appealing for cooperation; these are things that the other companies will learn from. You should tell them about how you went around the entire company, preaching with a sorting box you called the 'amnesty box for major paper users." Mr. Suga, an older senior staff member, expertly filled in when I, who was an assistant manager of the Documents Section of the General Affairs Department, became stuck. Although I would be thinking that something was certainly true, I couldn't explain it smoothly. At any rate, rehearsal went past 11 PM, and I still wasn't happy.

On the day of the presentation my feet felt terribly heavy on my way to work. When I got to the company a little late, I found the secretariat staff hurriedly seeing to last-minute arrangements in the meeting place. Mr. Suga was giving precise orders to Mr. Shimada and Mr. Fukuda, both of whom were from my same Documents Section. One after another, things were being made ready. The entire secretariat was pitching in. The appointed hour came, and I got my courage around the time that the room filled up with people from 35 different companies. Unlike the rehearsal, when I was stopping every 2 or 3 minutes, my talk was seamless. Even though Mr. Suga repeatedly mimed looking at his watch and kept signaling me, I went on 15 minutes longer than my allotted 45 minutes.

### The Circle of Member Companies

Which of these companies would really agree to participate in a trial period for Office Chonai-kai? I wondered if the way the entire secretariat felt was getting through.

The first four to sign on as partners were the Daiichi Pharmaceutical's head office, the Mitsubishi Hibiya Kokusai Building ,Nippon Telegraph and Telephone Corporation(NTT)'s Shinagawa branch, and the Tokyo Broadcasting System,Inc(TBS)'s head office. Their joining touched the secretariat. With the four being dotted around in Nihonbashi, Hibiya, Shinagawa, and Akasaka in Tokyo respectively, and then TEPCO's head office being in

Uchisaiwai-cho, they were a bit concerned that this was not exactly the image of a "neighborhood association." But then with the subsequent expansion of member companies to around 1000 offices, those dots became lines, and then entire areas.

Today, the member companies are telling us things like "Our mutual enthusiasm is why we are working together even though there was no business obligation or financial reason to do so."

It's true that for business districts, the different companies usually don't work together even if they are next door to each other. It is due to the collective spirit of the member companies that "neighborhood associations" such as those in my native Hamadori region of Fukushima Prefecture where it is 300km north from Tokyo, can be created in business districts.

# 3. A Misunderstanding as a Springboard

### NHK Raises An Issue

Increasing attention to Office Chonai-kai brought new challenges to us.

Before Office Chonai-kai could expand and become well established there were some ordeals that had to be gone through to convert misunderstandings and criticism into energy and reach a true understanding. One of them was documentary program produced and aired by Japan Broadcasting Corporation (NHK), Japan's national television station

As the program progressed, I felt a chill run down my spine. NHK Documentary 1991 "Paper Disturbance" aired at 10 PM for 45 minutes on February 27, 1991.

Office Chonai-kai was only at the pilot operations stage, but since it was the first cooperative collection system for used office paper, there was an astonishing amount of coverage by all the media. In the midst of all that, "Paper Disturbance" was an actual full-length television report. The way the NHK director was talking during the 4 days of taping, I was convinced that it was going to be favorable to Office Chonai-kai.

The program began as I had hoped it would. Mr. Fukuda and Mr. Shimada rolling the sorting boxes around on dollies, with Mr. Suga carrying a bunch of sorting manuals. Then to a shot of us secretariat members visiting a new Office Chonai-kai member company about 100 meters from the TEPCO's head office. Following this, a close-up of me talking about sorting awareness and methods. Mr. Arai and me heading out to see a member company in Marunouchi, showing trash before it is separated and collected and showing us checking whether the scheduled collections could smoothly enter the underground parking garage. In any case, it showed an appreciation for Office Chonai-kai as a new way of tackling things.

Then the tone of the program quickly became strange. The attention shifted to the used paper recyclers who collect cardboard put out by the merchants in the old downtown. The program was starting to play the story from the point of view of these people continuing the existing methods of collection, as if they felt confronted by such an upstart method as "Office Chonai-kai." The program's argument shifted, stating that to the people who had been going along steadily supporting used paper recycling, Office Chonai-kai was disrupting their place of work.

Someone from a waste hauling company that separates used paper from general trash that it has removed from offices had the following comment. "Although Office Chonai-kai is an ideal method for collecting used paper from offices, I would not want it to expand into the buildings where I already am working." And the program's narrator continued, "If the high-grade paper is sorted inside the offices, won't the trash accepted by the waste hauling company be sent on to the landfill without being re-sorted?"

Office Chonai-kai is meant to be a benefit not only to the offices side but also to the used paper recycling industry. I resented the fact that they failed to properly understand that this in no way invites confrontation between new and old, and that they reported such an erroneous view.

And then, I feared something even worse. Would TEPCO put the brakes on any further operation of "Office Chonai-kai?" Large organizations don't care much for risky ventures. Would the secretariat continue to be able to act freely?

Contrary to my own fears, the fact was I received a lot of encouragement from within the company. An executive in charge of the planning department who saw the program cheered me up, saying "If you try to create a new stream it could not move forward without adjustment with the existing stream. In the sense that it reminds us of this fact, the composition of the NHK program was right on target. Keep at it until NHK gets the point."

When I calmed down, it occurred to me that as we pushed forward with "Office Chonai-kai," we had perhaps overlooked its relationship with the existing used paper collection companies. Was I being too complacent in my conviction that the Office Chonai-kai system would be an efficient system for the used paper collection industry as well? Perhaps, after all, there was too much emphasis on the point of view of member companies.

As a direct response to the issues raised by NHK, I resolved anew to make Office Chonai-kai satisfactory to both the member companies and the used paper collection companies.

### Why Do They Go Out Of Business?

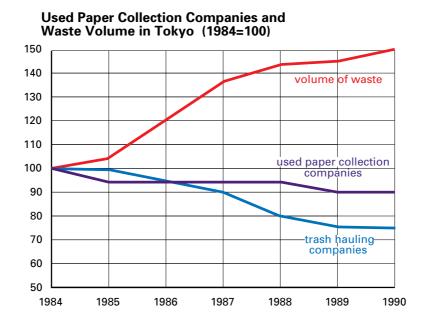
It was about two weeks later that I got telephone call from the NHK director saying "I thought you would have gradually cooled by now."

I had just been thinking about contacting him myself. The fact that we had each thought of it led to our setting up another meeting to talk.

I am told that directors rarely meet again with the people they have covered. It seems that when there is a discrepancy between the mood during the shooting and the content of the ensuing program, there is a lingering awkwardness. The director said he was sympathetic toward the concept and execution of Office Chonai-kai, taken by themselves. But, he said, during the taping he became increasingly aware of the question of what would become of the people who had been in the business of collecting used paper before.

I showed the director one piece of data. I showed him a graph showing the decrease in used paper collection companies and the increase in waste over a six or seven year period. The gap widened year by year.

(See Table-1) Used paper collection companies and waste volume in Tokyo (1984=100)



(Table-1)

At the time, it was already hard to find any toilet paper exchange men. Toilet paper exchange men go from house to house collecting used paper, bringing it to a wholesaler for a profit. Due to a downturn in the market price for used paper, however, not to mention the profit, they cannot recover the expense of the toilet paper that they leave in exchange for what they haul off, or even the primary costs of collection.

This sort of downward trend among the leaders in used paper collection was serious. In 1986, five years before the start-up of Office Chonai-kai there were around 1,500 people working in the used paper collection business in Tokyo. Five years later that number had dropped to around 1,000. It is estimated that collection yard space totals went down from 40,000 tsubo to 25,000 tsubo (1 tsubo = 3.54 square feet / 3.3 square meters). It is said that at the time, in Setagaya ward in Tokyo, which had soaring land prices, 80% went out of business.

The director, who had been listening intently to my explanation, reaffirmed the significance of the fact that Office Chonai-kai was the first to pay the collection costs for the collections industry that was going out of business even though it was a key player in the recycling picture. He fully realized that "Office Chonai-kai," in attempting to implement a system of contracts for the first time whereby the member companies pay the costs of collection for the used paper collection companies, was fundamentally helping the used paper collection companies. However, that day I couldn't come up with a definite plan for actually resolving collection conflicts between the existing used paper collection companies and collections carried out by "Office Chonai-kai."

Participation in the pilot operations of Office Chonai-kai had expanded to 30 companies. NHK raised the issue in February of 1991, when scheduled pick-up routes were actually starting, and I was strongly spurred on by the challenge of whether Office Chonai-kai could actually coordinate with the existing used paper collection companies and build relationships in which our motives were trusted.

### Direct Talks

The issue raised by NHK was "Won't Office Chonai-kai steal business from the existing used paper collection companies?" This could be answered. It was a test case for "Office Chonai-kai."

I thought that we must have direct talks. I took the initiative, since only thinking about this on the Office Chonai-kai side would not get anything started. I paid a visit to the directors of the Used Paper Hauling Business Association, one of the parties from the other side.

Although I expected strong angry on their side, concerned that an expansion of Office Chonai-kai would cause the trash hauling companies to lose their work sites; I winced at the extent of this misunderstanding.

Because the offices did not sort their trash themselves, the recycling method used by these trash hauling companies was to take all the trash back to their yards where they would then separate the used paper from the trash. They were saying that if the employees of Office Chonai-kai member companies were to get into the new habit of sorting the used paper and then Office Chonai-kai collected that used paper, which would indeed be a big blow to the trash haulers that had been servicing those companies.

I was not daunted.

I first frankly apologized for the fact that some of the collections from the member companies taking part in the pilot operations phase of Office Chonai-kai conflicted with the work of the existing trash haulers. I then asked them to please understand that, in order for the Office Chonai-kai fee structure to be satisfactory for the member companies who are paying the collection costs, it was vital that the collections be directly managed by, and the data from cooperative collection be accumulated by, the secretariat.

It appears that from the start, the trash haulers had in fact appreciated the fact that Office Chonai-kai had as a cardinal principle that the member company side would pay the collection costs. I was able to persuade them that, in order to satisfy the member companies paying those collection costs, it was necessary to get a handle on the costs byhaving the secretariat's collection vehicles make the rounds. It seems that in the absence of direct talks the gap had widened.

The problem was what do to when the collections by Office Chonai-kai and collections by the trash haulers coincided in the same building.

I proposed, as a way out of this, a new way to think about things, with the offices and the used paper collection companies cooperating with each other, with both as members of "Office Chonai-kai." This had been the prescription offered by Mr. Otawara, president of the Shigen Shinpo-sha (Resource Newspaper Co.) who had advised me in great detail about the used paper collection industry.

### The Used Paper Collection Companies Also Join Office Chonai-kai

Until that point in time, only companies had been members of "Office Chonai-kai," and it had been a premise that all collections would be done under the direct management of its secretariat, but as the basis for resolution of the issue, we decided we would have the used paper collection companies also join Office Chonai-kai as equal partners. If a used paper collection company had been handling the used paper of an office building before the building's employees adopted the practice of sorting it themselves, that company would now continue to be in charge of collecting. This would then eliminate the concern that the secretariat's collection vehicles would collect used paper, leaving only the trash that remained for the existing trash hauling company. Such trash haulers would become used paper collection company members of Office Chonai-kai and as such would collect the used paper sorted on the premises by the employees of the office company members. It was decided to have this policy apply to all the used paper collection companies.

The directors then brought up a new concern, namely that if trash hauling companies became members of Office Chonai-kai and were allowed to make collections, the wholesale dealers to whom they could deliver used paper would be dictated. To this I replied that Office Chonai-kai would respect the existing business practices of the used paper collection business, and let the used paper collection companies determine on their own free will to which dealers they would deliver the used paper. The fundamental principles of the Office Chonai-kai system are that the employees of the member companies develop the new practice of sorting their own used paper, and that the member companies agree contractually to cover the collection expenses incurred by the used paper collection companies. The system works smoothly when the used paper stream itself is entrusted to the professional collection businesses. There is nothing better than talking things over directly face-to-face. The expressions on everyone's faces softened, and the discussions continued.

In 1991 in Tokyo the union-affiliated trash hauling companies alone numbered around 70 firms. They collected the trash from a total of 1,000 office buildings, sorting it on their premises and sending approximately one half to be recycled. The buildings that the trash hauling companies were already servicing were thus already recycling, albeit indirectly, before the office building employees started sorting on their own.

As the meeting was ending, one of the directors said, "If only Office Chonai-kai had started operations earlier, some of our colleagues would not have had to go out of business. As a result of our partnership with Office Chonai-kai the time is coming when the social role that the trash hauling companies have been performing will be understood. In that sense, you people have become the planning people for us the used paper collection companies, or should I say you've made us more appealing."

Another director said, "We have been servicing that building for 30 years, and during that time there has not been a single accident, which is something we are proud of. And now with Office Chonai-kai the relationships will be beexpanded, and we will exert ourselves all the more, because the office employees will be taking time out from their busy work to separate the used paper from the trash."

I thought that with this I had directly answered the issues raised by NHK, and I felt that I got a positive response to an Office Chonai-kai that would operate as a partnership between office building members and used paper collection company members.

Starting with this opportunity and continuing to this day, every time the membership of Office Chonai-kai increases

by one office company, a used paper collection company also becomes a new member, with the exception of cases where there had been no used paper collection companies servicing the buildings before. We were able to establish a true relationship of trust with the collection industry.

If there had not been a partnership created in response at this time, I don't believe that there would have been any way that Office Chonai-kai could have 1,111 member company offices linked by a network to 46 member used paper collection companies, as it does now, or that it could have produced an annual recycling volume that reaches 9,500 tons.

## 4. The Official Startup of Office Chonai-kai

Proving Cost-cutting measures With Numbers

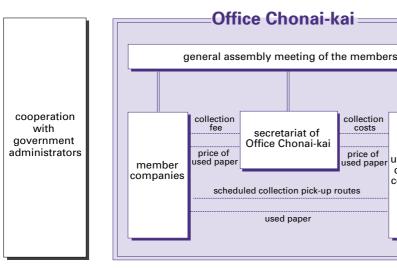
Office Chonai-kai held a general assembly meeting of the members on August 22, 1991. The pilot operations of the Office Chonai-kai system, in which regularly scheduled collection routes were run between the offices of 30 companies over a period of several months, had yielded a treasure of know-how and cost data regarding the cooperative collection of used office paper. Based on the actual results, we were able to draw up the operating rules and the fee structure to operate Office Chonai-kai for real, and with the unanimous vote of approval by the members, Office Chonai-kai formally started operations.

Office Chonai-kai is the first contractual system whereby the member companies pay the collection costs. For that reason, the pilot operations were also for the purpose of persuading the member companies, on the basis of the data, about the necessity for the companies to bear the costs. It was necessary that the member companies who were actually paying the collection costs accept the fee levels.

As a result of the pilot operations, the following points substantiate the cost-cutting measures of the Office Chonai-kai system. They all reflected the operation and fee structure of Office Chonai-kai.

- o The collection industry's former method, in which they sought to cover the collection costs with what wholesale dealers paid them for used paper, is no longer viable, making it absolutely necessary that the office company side pick up those costs as the basis for used paper sorting and collection from now on.
- o On the other hand, even if the office company side pays for the collection costs, with the operation of the Office Chonai-kai system of sorting and scheduled collection pick-up routes it will be cheaper than the existing municipal waste disposal fees that they were paying for trash handling.
- o Furthermore, the costs to the member companies are assuredly less, even with the necessary operating expenses of the secretariat of Office Chonai-kai added to the collection costs that the member companies pay

(See Figure-2) The system of Office Chonai-kai.



cooperation with used paper collection industry and paper industry

used paper

collection

companies

(Figure-2)

It is because of the economically feasible measures for both the offices side and the used paper collection company side, established in this manner, that Office Chonai-kai has been able to continue its socially contributing activities of sorting and collecting used paper throughout the ten years of social and economic change since its start. Additionally, by having the offices side pay for the operating expenses of the secretariat and by making the secretariat financially self-sufficient, Office Chonai-kai has made it possible for the secretariat to continue to provide consulting services to new member companies, manage the scheduled collection routes, adjust the fees, perform the annual closing of accounts and other basic secretariat services. This enables it to operate on a daily basis as an association. Because it can ensure the secretariat's planning and promotional capability and budget to support the creation new Office Chonai-kais in other areas and promulgate recycled paper, Office Chonai-kai can now tackle to make new contributions to society.

Generally speaking, company projects for contribution to society are inevitably subject to business performance at the time, and there is nothing that can be done about that. Addressing this point, I believe the establishment by Office Chonai-kai of what we call the "3 Economies" is the basis upon which the sorting and collection of used paper, which in this case are activities that contribute to society, will be able to continue. The "3 Economies" are economics for 1) the member companies, 2) the used paper collection companies and 3) the secretariat.

The next table shows how the "3 Economies" of Office Chonai-kai are substantiated even under an actual settlement of accounts. As shown in the year-end accounting for the year 2000, the receipts and payments were balanced at over180 million yen and Office Chonai-kai has continuously operated in the black for the ten years since its start. (See Table-2) Office Chonai-kai Financial Results for the Fiscal Year 2000 (See Figure-3) Economies" of Office Chonai-kai

### Office Chonai-kai Financial Results for the Fiscal Year 2000

Total amount of used paper collected for the fiscal year 2000, 8710 tons.

( ) indicates the unit price per kilogram.

receipts	collection fee	collection bag fee	price of used paper	total	
	¥169,050,000 (a ¥19.4)	¥1,680,000 (b¥0.2)	¥17,820,000 (c¥2.0)	¥188,550,000	
payments	collection costs	operating expenses of the secretariat	price of used paper	total	
	¥115,950,000 (d¥13.3)	¥50,820,000 (e ¥5.8)	¥17,820,000 (f¥2.0)	¥184,590,000	
carry-over to the following year			¥3,960,000		

### "3 Economies" of "Office Chonai-kai"

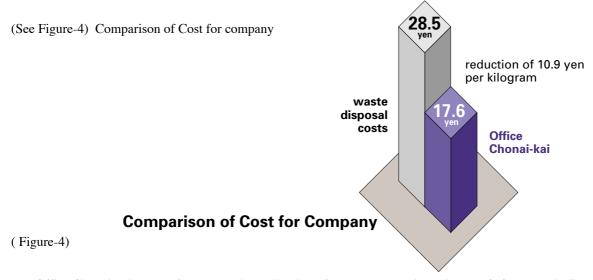
 Collecting used paper must cost less for the member companies than what it costs them for waste management.

The collection companies must be ensured that their collection expenses are covered even if the market price for used paper becomes depressed.

3. The secretariat shall be able to develop its activities freely on the basis of a self-supporting accounting system.

e 5.8 yen/kg

(Table-2) · (Figure-3)



The Office Chonai-kai system for cooperative collection of used paper, having this sort of "3 Economies" as its basis, has led to the formation of "Eco-Office Chonai-kai" in several wards within the metropolis of Tokyo, operating them in cooperation with the municipal offices of Chiyoda Ward, Chuo Ward, and Minato Ward. Together with these three "Eco-Office Chonai-kai" there are now a total of 1,111 offices that have joined as member companies.

(See Table-3) Number of Member Company's Offices and Collection Vollume of Used Paper in Office Chonai-kai

# Number of Member Company's Offices and Collection Volume of Used Paper in Office Chonai-kai

	number of offices	collection volume (tons per year)
Office Chonai-kai	296	8,710
Chiyoda Eco-Office Chonai-kai	371	328
Chuo Eco-Office Chonai-kai	295	287
Minato Eco-Office Chonai-kai	149	145
total	1,111	9,470

Note: Number of offices as of September 30, 2001, actual collection volume in 2000.

### (Table-3)

Office Chonai-kai's creating multiple Office Chonai-kai that reflect the particular traits of a region, and Office Chonai-kai's activities are spreading from the 23 wards of Tokyo across the entire country through the efforts of member companies, used paper collection companies, volunteer groups, local governments and the like. Starting with the Kanto region – Tokyo Tama, 21 Minato-mirai in Yokohama, Urawa, Ageo, Mito, Tsuchiura, Maebashi, Numata, Utsunomiya, Chiba, Kisarazu, Sodegaura, Higashi-ogishima, Minobu and others – it ranges from Hokkaido to Kyushu from north to south in Japan. We of the secretariat intend to continue to assist in the creation of yet more Office Chonai-kai throughout the country.

Another thing approved at the general meeting was making it a new practice in the offices of the member companies for the employees to do their own sorting, and to have this be a cornerstone of Office Chonai-kai's activities. Sorting done by the office employees themselves makes the difference between used office paper being thrown away as paper trash, or being used effectively as the basic material for recycled paper. This is why getting the office employees into the habit of sorting is the cardinal operating principle of Office Chonai-kai.

Furthermore, I also think that there is a deeper meaning in making sorting a habit in this way.

Around ten years ago, when Office Chonai-kai started up, was when catch phrases like "Earth -Friendly" starting cropping up in businesses. Finally now, businesses have become serious about recycling and the environment, but the catch phrases preceded this. I believe that was the time when "Earth-Friendly" businesses were searching around for something their individual employees could be actually doing in this regard, and they had begun studying this anew. We who had approved of competition for plentiful goods and better service were coming up short when it came to education about recycling and the environment.

That is the role I thought could be filled by making sorting a habit. To people who are at work, paper is a commodity to some degree. I thought of sorting that paper as a first step toward imposing an awareness and practice of recycling and the environment. If the practice of sorting takes hold, people who are out for a Sunday drive, say, may hesitate before tossing a cigarette or an empty can out the window. At their own company, it will probably have an influence even on the way we as principals follow up on our handling of our industrial waste.

In the home, housewives are now in the habit of sorting the garbage for recycling, and young children are taught the importance of recycling in school. I am sure that there are quite a few fathers who have been taught about sorting by their children. Our generation had already grown before recycling and the environment became serious considerations.

I think that getting office workers who spend more than 8 hours a day in their offices into the habit of sorting used paper is the gateway to a form of adult environmental education. If you don't keep it in mind all the time, we will easily forget, however, so it takes time and patience. But the total number of employees in the member companies who have made it their practice to sort, thanks to the activities of Office Chonai-kai, is now over 100,000 people. Office Chonai-kai has been able to make a contribution by joining this concept and economical feasibility in order to have the sorting of used office paper take root. In April of 1994, in its fourth year of operations, Office Chonai-kai was awarded the very first Prime Minister's Award of the newly created Citations of Merit to Promote Recycling.

To commemorate the receipt of this award, which recognized the cooperation of the various member companies and used paper collection companies that are the members, we held a small gathering. We had a puppet made to resemble the Prime Minister at the time, Mr. Murayama. We dressed it in the happi coat made with Edo purple, ancient purple dye, that is Office Chonai-kai's symbol mark and rejoiced all together.

# 5. TEPCO's "Flexible Support"

### Heresy and Uncertainty

The job of creating an in-house sorting and collection system at TEPCO was one of the duties that would naturally fall to me due the fact that I was with the Documents Office of the General Affairs Department at the time. At the same time, Office Chonai-kai went outside the framework of the company and, linking up with numerous other businesses, entered the territory of volunteer activity, making a contribution by building a corporate structure for

recycling used office paper through deepening the relationships with new partners, namely the used paper collection companies.

TEPCO is a company that understands projects that serve society because it is a public utility in the electric power business. Even so, compared with my original work, I think I had become too involved in the creating of Office Chonai-kai, and I was a heretic. Because I was still working my usual job and also running Office Chonai-kai on a volunteer basis, I remained a little reserved. One reason I made certain that the secretariat costs were covered by the Office Chonai-kai fee structure and that the secretariat would be able to operate with a self-supporting system of accounting was so that the company would not have to carry any of the financial burden. That was my sense of balance at the time.

The chief of the Documents Section was the most understanding about my continuing to do my existing work and also heading up the secretariat of Office Chonai-kai on a volunteer basis, and I tried to keep communication with him as much as possible. Because the operation of Office Chonai-kai was a series of hypotheses that were then put into practice, occasionally there were times I could not make a decision. At those times, I would argue or have discussions with the secretariat staff or deal with the collection companies on the phone in a voice loud enough to annoy the section chief sitting next to me. And when I would do so, the section chief would often signal to me to say "I am a little concerned about what you were just talking." There were many times, through his advice offered from a different angle, I was able to switch to a more suitable approach.

We on the secretariat staff couldn't know when relocations or transfers would be ordered in the companies. Just when Office Chonai-kai's activities were slowly getting on the right track, there was uncertainty among the secretariat staff as to what any one person's relationship to Office Chonai-kai would be in the future. We had mixed feelings; we were attached to Office Chonai-kai, but we also sensed that sometime we would have to "graduate" and move on.

With this sort of thing as background, at one point we gave serious thought to changing the operation of Office Chonai-kai from what had been a volunteer group to a corporation. We had an obligation to our members to set up an ongoing organization so that the activities of Office Chonai-kai would not be slowed down by personnel changes on the secretariat staff.

There is a difference between creating a joint-stock corporation, where the normal objective is to make profits and distribute them to the shareholders, and the fundamental stance of Office Chonai-kai which, rather have commercial gain as an objective, is a group that goes after making contributions to society. Even with our established financial basis, it would be difficult to make Office Chonai-kai into an incorporated foundation that has as a prerequisite sufficient amount of money in reserve as its endowment. So rather than commercial gain as an objective, from the standpoint of a collective for people, an incorporated association seemed to be the most appropriate form of Office Chonai-kai.

### A Sudden Occurrence

During that time I also was a lecturer for a recycling study group run by a certain incorporated association. The executive director of the secretariat of that incorporated association unexpectedly made an offer. "Can I help you get the secretariat

functioning for Office Chonai-kai?"

This incorporated association was established just after the war for the purpose of helping companies become efficient. But it had now already fulfilled that social role. The director of the secretariat and I had a big laugh about recycling the association itself. He also made a proposal; "I've watched as a bystander what you people have been doing, and you are doing things that are making a social contribution that is rare for business people. We would like to pass along our incorporated association to you in an honorable succession."

It was obvious from the director's demeanor and manner of speaking that this was not the proposal of sales and purchases of an incorporated association that had been making a stir in a part of the society.

There was something that charmed me about this. Although some of the Office Chonai-kai member companies had been of the opinion that "If we merge with an incorporated association, the name 'Office Chonai-kai' will be gone, and that would be really sad," the director said he would change the name of his association to "Office Chonai-kai." The director and I went to discuss with the government authority in charge of this incorporated association. Although it was pointed out that the articles of incorporation needed to be amended, among other things we were told that it would be around  $2{\sim}3$  weeks between application and approval, and so we had a good feeling about it. However, in such discussions, I was overeager. I wanted to quickly establish the operation system for Office Chonai-kai, and through my impatience I did something inexcusable to the director of that secretariat. The responsibility was all mine.

### What the Board of Directors Really Thought

The argument over transforming Office Chonai-kai into an incorporated association rose all the way to a General Affairs Department board member.

What the board member pointed out was exactly in line with of my own awareness of the issues. "Is there any trouble at TEPCO for you to do the Office Chonai-kai activities?"

The section director of the documents section, who was my immediate superior, couldn't have been more understanding. In a word, there was no problem at all in the company to do the Office Chonai-kai activities. "Isn't the worth of Office Chonai-kai in the fact that it is created by down-to-earth, grass-roots efforts? Isn't its very nature as a voluntary association, putting together member companies and collection companies to continue recycling, its value to society? Although non-profit foundations are assuredly stable, generally, there also is a feeling that they don't have the vigor to rise up to the next level. I recommend that it remain the non-profit as it is now. If the secretariat is too much work, then why don't you come right out and ask for help from the members? Isn't there some way of running it so they could work with the secretariat?"

I realized that this was considerable encouragement from the board member.

I quickly felt ashamed. Ashamed of myself that I had ever worried about whether there were persons in the company who regarded the activities of Office Chonai-kai as heresy.

As a representative of Office Chonai-kai who had started up Office Chonai-kai with a strong attachment to it, my progressive stance hardened. We had a network of trust with the member companies and the collection companies. We also had a cohesive secretariat. And there were a lot of people in and out the company who understood what we were doing.

I simply had to go immediately and meet with the secretariat director.

I saw the director of the secretariat and he energetically talked about old days when he had been involved in energy-related work in Europe and America. I let him know my final personal decision, that I was electing to keep Office Chonai-kai as a voluntary association, and apologized.

"Because it is you who said it, I would accept what you just said. Actually the same sort of thing has happened to me. Encouragement from your boss seems generous consideration of the person. And, you didn't have lot to say today." I was saved by this big-hearted secretariat director who as a former businessman had a lot of experience with organizational and personal relationships.

### "Flexible and Firm Support"

In 1994 I was transferred from the General Affairs Department to the Site Environmental Division, and in 1997 I was posted to the Hamadori region of Fukushima Prefecture, which happens to be where I was born. As a new

project of TEPCO to help promote the region of Fukushima prefecture, which cooperates with us on one quarter of the electrical power source sites for the Tokyo metropolitan area, I was concentrating all my energies on planning, building, and running the National Training Center for Foot Ball ("J-Village"), in cooperation with Fukushima prefecture, The Japan Foot Ball Association, and J-League. Leading up to the 2002 World Cup, this is where the Japanese national team under Coach Troussier would often hold camp. As a result the place gained national visibility, the visitor population increased and it was good for promoting the region.

During this period, my activities as head of the secretariat of Office Chonai-kai couldn't help but be curtailed. But I continued to run used paper recycling study groups with the Environmental Section of the Fukushima prefectural government as well as the local Junior Chambers of Commerce in Minami-Futaba, Namie, Koriyama and others. In particular, my meeting Mr. Kanno and Mr. Konno of the Fukushima Junior Chamber, with whom I started up sorting and collecting in Fukushima City, led to the realization, in 2001, of the nation-wide summit "Just The Right Whiteness – Whiteness 70" which was organized by the Japan Junior Chamber and Office Chonai-kai. By coincidence, these two were sent from the local area to the headquarters of Japan Junior Chamber, and so we teamed up for a second time to lend our efforts to staging the national summit.

TEPCO started to help out by providing an assistant head for Office Chonai-kai's secretariat. Both Mr. Igarashi, the original assistant head, and Mr. Harada, the second one, had lent support to Office Chonai-kai regardless of the fact that the head was not there. Taking a fresh look at the operation of Office Chonai-kai which had been going full steam since its beginning, these two assistant heads became central to improvements that were made in our business practices. Three people from the Documents Section helped indirectly – Ms. Komahara, Mr. Yano and Mr. Takizawa. The freelance writer Ms. Furuta helped with the publication of the bulletin "Rings," expanding the communication between members.

Member companies also helped with the administration of the secretariat in the form of advisors. Mr. Sakurai of Daiichi Pharmaceutical Co., Ltd., Mr. Kumagai of Mitsubishi Estate Co., Ltd., Mr. Takabe of Nippon Teleglaph and Telephone Corporation (NTT), Mr. Watanabe of Tokyo Broadcasting System, Inc. (TBS), Mr. Itoh of Yamanouchi Pharmaceutical Co., Ltd., and Mr. Katsumata of Kandenko Co., Ltd. are advisors to Office Chonai-kai. In 1996 the top management of TEPCO reaffirmed its "flexible support" for Office Chonai-kai. Even though Office Chonai-kai is a TEPCO project for the benefit of society, the phrase "flexible support" means that, rather than administering it with the internal logic, practices and customs of the company, TEPCO, putting itself in the members' place, wants Office Chonai-kai's to be able to continue to freely operate as an independent entity as much as possible. In line with this, the TEPCO internal support mechanism for Office Chonai-kai was transferred from the General Affairs Department to the Environmental Department.

In 1999, I was transferred from J-Village to the Business Development Department, and since then I have been working on the start-up of a new energy service, called "My Energy," that uses small-scale electrical power distribution. It is a part of a new business that TEPCO has taken on in earnest. Even if I were to return to Tokyo, I would not be able to adequately carry out the role of heading Office Chonai-kai, but the secretariat is doing a wonderful job of running Office Chonai-kai in its eleventh year with 5 people, starting with the third assistant head for the secretariat sent by TEPCO, Mr. Ogata, Mr. Uchida from Tokyo Electric Power Environmental Engineering Co., Inc., and female staff members Ms. Sakai, Ms. Tamura, and Ms. Kikushima.

I am truly grateful for TEPCO's "flexible and firm support" that consistently ensures freedom and discretion for Office Chonai-kai's activities and supplies it with a continuous stream of human resource.

# II. Spreading the Word: "Just The Right Whiteness – Whiteness 70"

We did not stop with just the collecting of used paper; the collected used paper had to be reused, which is to say recycled paper had to be used, and moreover made to take root as an economic system. This had to be done by all means in order to complete the recycling of used paper. The systematization of sorting and collection, and expanding the use of recycled paper are both indispensable to the recycling of used paper. As we at Office Chonai-kai were pushing forward with our sorting and collecting activities we became keenly aware of the importance of expanding the use of recycled paper.

The situation with the market for the types of paper that are the most familiar, such as toilet paper and copying paper, is that their market share was being attacked by virgin pulp paper and recycled paper market was depressed. So how should the use of recycled paper be expanded? Office Chonai-kai turned its attention to paper "whiteness." We assumed that for both manufacturers and users, there must be some sort of "adequate whiteness." And we thought that if one could get rid of the "excessive taste for whiteness," recycled paper would be better accepted.

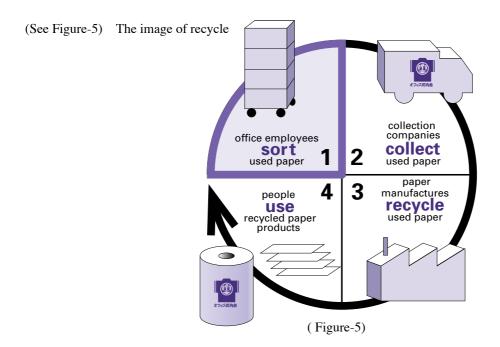
## 1. The Challenge of Expanding the Use of Recycled Paper

The "Office Chonai-kai" Brand

In 1993, as a new activity Office Chonai-kai started to promote the expanded use of recycled paper through volunteer activities.

We started by targeting toilet paper, the paper that is most familiar in daily life. I also chose toilet paper because although at one time almost 100% of toilet paper was recycled paper, it had already lost a 30% share to virgin pulp paper, and there were worries that a trend to recede even further was gaining strength.

We worked out a strategy for creating an "Office Chonai-kai" brand toilet paper. With the cooperation of an agreeable manufacturer of recycled paper, we planned to sell toilet paper commercially that was made from used paper collected from our member companies as the base material. Our thinking was that selling it commercially in the real market would be spreading the word of recycled paper to the largest number of people. Office Chonai-kai would not be involved with the money, but would just offer our brand.



Recycled toilet paper had an erroneous image to some as being inferior, so "Office Chonai-kai" brand toilet paper was a product that strived to be accepted by consumers as much as possible, through such things as devising a way to make it soft even though it is recycled paper.

To begin with, the member companies took the lead in using the product. The member companies wanted to have awareness of recycling take root among their employees by having them use toilet paper that had been recycled from used paper that the employees had sorted themselves. The fact was, however, that most of the toilet paper used in the offices of the member companies had always been recycled paper, so it became necessary to target household use for our promotional activities.

We made the case for expanded use of recycled paper by attending the Recycling Fair held at the plaza of Tokyo City Hall, and on the weekends we gave out samples of "Office Chonai-kai" brand toilet paper to consumers. It seemed as if our activities were going along smoothly. Some supermarkets were carrying "Office Chonai-kai" brand toilet paper. Even department stores picked it up for their mail order business. We even tried offering gift sets of "Office Chonai-kai" brand toilet paper, tissue paper, and pocket tissues, and gift coupons for them.

The toilet paper market, however, is huge, and with the way we were going about our activities, there was no way to stop the loss of market share to virgin pulp product. 80% of all toilet paper for household use is purchased in supermarkets. We went around to the supermarkets repeatedly, asking them to please carry the "Office Chonai-kai" brand, and when we did this we saw how supermarkets position toilet paper as merchandise.

To the supermarkets, toilet paper represents a so-called loss leader or come-on. It is merchandise that is piled high in the stores, meant to attract attention. It often figures in fliers advertising special sales.

The price of recycled paper is fundamentally much cheaper than virgin pulp paper if you compare the list prices. But when toilet paper made from virgin pulp, considered to be relatively expensive, is put on sale as a loss leader, the consumers reach for the virgin pulp product. If the toilet paper made from virgin pulp is being sold at list price in the interior of the store in the "toilet paper corner", there is a higher possibility that the consumers, following the principles of economics, would select the toilet paper made from recycled paper, but unfortunately the toilet paper made from virgin pulp continues to be used for loss leader in bargain sales. At this rate, there will never be an economic incentive for consumers to consciously use recycled toilet paper.

### What I Learned From Toilet Paper

I learned two major things from our large project targeting toilet paper to expand the use of recycled paper. The problems appear to be much more clearly defined when they are considered in comparison to the success that Office Chonai-kai had with its original activity, which was the systemization of sorting and collecting.

The first thing I learned was that whatever the activity, for it to succeed an economic incentive must be essential ensured. No matter how significant a project is, unless it can be viable economically it will be short-lived.

We were able to establish the "Three Economies" for the Office Chonai-kai system

- 1) Collecting used paper must cost less for the member companies than what it costs them for waste management, and must result in lower costs.
- 2) The collection companies must be ensured that their collection expenses are covered even if the market price for used paper becomes depressed.
- 3) The secretariat shall be able to develop its activities freely on the basis of a self-supporting accounting system. That is why it has been able to continue without being at the mercy of the tides of business.

On the other hand, our major undertaking of targeting toilet paper to expand the use of recycled paper was unable to engage the principles of economics, due to the special characteristics as a loss leader that disregards profits, and so it couldn't advance. I realized that for there to be a real expansion in recycled paper use, we needed to establish a "fourth economics" that was good for both manufacture and consumption, in other words the manufacturers and the users. For that purpose I needed to discover a new approach.

The second problem is the difficulty of changing people's awareness.

Office Chonai-kai has gotten a passing score for motivating the some 100,000 employees of its member companies to get into the habit of sorting. On the other hand, we have to reform the manufacturers' and users' mindset of "sticking to whiteness."

This was a high hurdle to get over.

On the packaging of "Office Chonai-kai" brand toilet paper there was the message "Prefer Recycling To Whiteness." "Office Chonai-kai" brand toilet paper did not try to have the same "whiteness" as toilet paper made from virgin pulp. Even though it was recycled paper, it used absolutely no bleach.

But the fact was, most toilet papers made from recycled paper tried to have the same degree of "whiteness" as that made from virgin pulp, as if to say "the Japanese people believe in "whiteness". It's unclear if the consumers actually think that way, but it is also not hard to see why the manufacturers of toilet paper made from recycled paper may take that to heart.

The fact is, even if it is bleached, the "whiteness" of recycled paper differs from that of virgin pulp, so toilet paper made from recycled paper becomes a "knock-off" of the virgin pulp product. It was as a result of this, I thought, that the strategy of differentiation through a reform in perception, embodied in the "Prefer Recycling To Whiteness" line, could not take hold. One can see at glance that the toilet paper in Europe's first-class hotels and its airports is made from recycled paper. This is a better way to make the case to consumers for the importance of expanded use of recycled paper.

This made me think that there had to be some sort of breakthrough, where either the manufacturers or the users would take the lead and have the courage to discard the "strong preference for whiteness."

## 2. Going All-Out For "Just The Right Whiteness – Whiteness 70"

### Focusing On Copy Paper

We focused anew on copy paper as a target on the user side with an economic incentive. Copy paper is the most familiar type of paper to our member companies where costs are crucial. We framed the hypothesis that if a copy paper made from recycled paper was created that was cheaper than virgin pulp product, we could actually expand the use of recycled copy paper.

As to discarding the "preference for whiteness", as people at offices don't need "excessive whiteness" for copy paper used in offices, we expected that business users could rationally depart from mindset of excessive whiteness. In the copy paper market at the time, virgin pulp product accounted for around 73% and was dominant. Although recycled copy paper also had been faring well with the heightened momentum for recycling, its market share had leveled off. Additionally, recycled copy paper was trending to product with "excessive whiteness." In the market, neither the manufacturers nor the users could surmount the "strong preference for whiteness."

Recycled copy paper of excessive whiteness must use for its basic ingredient used paper of a higher grade than newsprint or magazines, and what's more it was estimated that the cost to the manufacturer was also higher due to the use of bleach. This type of recycled copy paper merely adds to the burden on the environment, and was actually more expensive than the virgin pulp product. We were concerned that in the long run the economic burden to the consumer would increase and its use would dwindle, bringing about a vicious cycle for recycling used paper.

### Wisdom At A Discussion Forum

Office Chonai-kai changed the target, to recycled copy paper, for its major project to expand the use of recycled paper, and went about preparing to resume propagating. Defeating the "strong preference for whiteness" would require the cooperation of both the manufacturers and the users, so, with the help of experts in various fields, we organized "Whiteness Awareness Reform Project Discussion Forum" (chaired by Prof. Yorimoto of Waseda University). Various people expressed their opinions and we were able to work out a strategy and set a course of action. We also asked the DYNAX Urban Environment Research Inst., Inc., which is very knowledgeable about recycling projects, to take part as secretariat for the forum.

They prepared a compilation of recommendations from the first seminar, held in October of 1994, entitled "Thoughts on Adequate Whiteness for Copy Paper" for us, which is used to this day as a guideline for our activities.

Both the user side (academic experts, media, and government administrators) and the manufacturing side (manufacturers and suppliers) took part in the discussion forums as members. The manufacturers and, in particular, the suppliers were skeptical about counteracting the devotion to virgin whiteness.

The user side, however, led the discussions and they moved the manufacturer side along the same direction. The forum members from the user side said that, from the highly competitive manufacturing point of view, it was obvious as a business that "consumers prefer whiteness" and that in their analysis the heart of the problem lay with the users. A scenario for expanding the use of recycled paper was set wherein the first thing that had to be done was for the user side to change their own awareness of "excessive whiteness," upon which the manufacturing side would also be able to concentrate on producing and selling recycled paper without uncertainty.

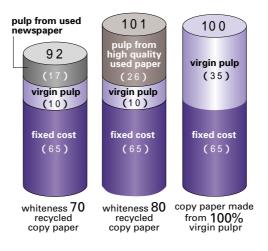
Any industry, any business has no choice but to give highest priority to directions in the market. The forum members concluded that, rather than criticizing the manufacturing side for nothing, the user side must join in taking the lead in establishing a market that is favorable to recycling.

When this perspective was conveyed to the forum members from the manufacturing side, the manufacturer side said that it would provide valuable data comparing the manufacturing costs of virgin pulp copy paper and recycled copy paper. Office Chonai-kai's activities emphasized "economical feasibility." No matter how good something was, if it were not "economically viable" it would not take root as a mechanism. Even for projects to popularize recycled paper, if they can't be seen as "economically viable" they will end after being only temporarily appealing to a sense of ethics. The data comparing the manufacturing costs of virgin pulp copy paper and recycled copy paper revealed the following.

(See Figure-6) Comparison of Manufacturing Cost for Copy Paper

### Comparison of Manufacturing Cost for Copy Paper

The cost of manufacturing virgin pulp copy paper = 100.



(Figure-6)

If the cost of manufacturing virgin pulp copy paper was said to be 100, then the cost of manufacturing recycled copy paper with the same degree of whiteness as virgin pulp paper, "whiteness 80,"\* would be 101, which is higher. Compared to this, the manufacturing cost for recycled copy paper with the "whiteness 70," considered as the "Just Right White" at the forum would be 92, a level representing a reduction in cost. It became clear that, actually for the manufacturer side as well, "whiteness 70" was "a desirable whiteness."

The forum members from the user side as well as those of us on the secretariat thought we had discovered a breakthrough to popularizing recycled paper.

On another front, the forum did monitored studies of businesses actually using "whiteness 70" recycled paper who had until then used virgin pulp copy paper. The results showed that many people said they had no problems with using "whiteness 70" recycled copy paper on a daily basis. At the companies where the monitored study was done where people were not told they were using "whiteness 70" recycled paper, nobody noticed. The difference in whiteness is really about that amount. "Whiteness 70" was supported from both sensory and qualitative points of view. In some sense our hypothesis was proven. But there were some who voiced resistance to its use outside the company and in official documents. An "mindset to prefer excessive whiteness" definitely existed after all..

In response to the discussions, data, and monitored studies, the participants in the forum reaffirmed a fundamental direction of the projects to expand the use of "whiteness 70" recycled copy paper.

In the same way that the "three economies" were established with the companies, the collection companies and the secretariat that make up the collection system in order to realize the expanded use of recycled paper, it is essential that there be a "fourth economy" to tie together the manufacturer side and the user side. For "whiteness 70" recycled copy paper, with its manufacturing cost edge for the manufacturer side as the breakthrough, if the manufacturer side can take the lead to create a market that accepts it, the price of recycled copy paper which was higher could then be lowered. Subsequently, through the action of economic principles this would create a virtuous cycle that expands the use of recycled copy paper. It was the recommendation of the forum that the new role for Office Chonai-kai should be to translate this sort of scenario into reality.

\* "Degree of whiteness" indicates the whiteness of the paper. It is the relative value of the amount of light reflected from the paper where 100 is the amount of light reflected from a magnesium oxide standard white board.

### Powerful Partnership with Japan Junior Chamber

Members from the Japan Junior Chamber also participated in the discussion forum. At the time, the Japan Junior Chamber was promoting its "Mottainai Movement" and had taken up recycling and other environmental activities. This movement and the "whiteness 70" project both came out of the same inspiration, so to implement the recommendations of the forum, the two organizations decided to develop volunteer activities together to stimulate the market for recycled copy paper. Office Chonai-kai gained a powerful partner.

Among the joint activities of Office Chonai-kai and the Japan Junior Chamber, the one that would have the biggest effect on future developments, was the analysis of a questionnaire survey sent to 65,000 members of the Japan Junior Chamber.

What caught our attention the most was the number of comments that said, "Recycled copy paper is tricky to use for documents submitted to government offices." We decided to narrow down our target to breaking the "preference for whiteness" and to make the case to municipal governments to expand their use of recycled paper as the "top runner".

From 1997 through 1999 we held "Whiteness 70 Symposiums" in Tokyo, Osaka, Sapporo, and Kita-Kyushu, continuing our recommendation to expand the use of recycled copy paper as many of the municipal governments of each region as possible. In addition to the Japan Junior Chamber and Office Chonai-kai as hosts, these symposiums

were developed with the joint sponsorship and support of the municipal governments of the Metropolis of Tokyo, Osaka Prefecture, Osaka City, Sapporo City and local chapters of Japan Junior Chambers. The Environment Agency and the Ministry of International Trade and Industry also cooperated.

At the time, in 1994, the people who contributed to this book – Prof. Yorimoto (Waseda University professor), Mr. Yokoshima (NHK commentator), Mr. Tatsuno (president, Asahi Culture Center Co.Ltd), Mr. Mitsuhashi (assistant managing editor, Nihon Keizai Shinbun Co.Ltd [Nikkei]), Mr. Yasuma (manager, Tokyo Metropolitan Sanitation Department Waste Reduction General Office), Mr. Kato (Chief Engineer, Honshu Paper Manufacturing Co.Ltd,Production Engineering Department), and Mr. Muraoka (Executive Director, Japan Junior Chamber "Hometown Earth" Office)— joined us in the activities of the "Whiteness Awareness Reform Project" seminars and in putting on the "Whiteness 70 Symposiums." and consistently lent support to our activities to expand recycled paper. In addition, Mr. Nakamura (Manager, Nippon Paper Industries Co., Ltd. Technical Planning Department) and Mr. Okumura (Manager, Oji Paper Co. Ltd. Planning Department) submitted the data about the economic advantages of "whiteness 70" that became the basis for the recommendations from the seminars. (All job descriptions are as of that time period.)

### A Great Deal of Positive Response and The Response of The Market

Thanks to so much support, the major project to expand the use of "whiteness 70" recycled copy paper has created an expanding ring of acceptance in all directions.

First of all, we got a positive response in the Tokyo Metropolitan Government. When the Tokyo Metropolitan Government positioned "whiteness 70" recycled copy paper in its guidelines for using recycled products that were promulgated in October of 1996, in a single stroke that triggered its spread to the entire country.

We also got a positive response from the Environment Agency. The agency specified "whiteness 70" recycled copy paper in the guidelines for its list of recommendations. The Environment Agency cooperated fully with Office Chonai-kai through such things as distributing our "whiteness 70" promotional pamphlets to local governmental offices throughout the country.

The media also gave it a positive response. In the 2 years between 1997 and 1999 it received encouraging editorial mention as many as 10 times each in editorials of the Nihon Keizai Shinbun (Nikkei), the Tensei Jingo column of the Asahi Shinbun, the Yomiuri Shinbun, etc.

Due to such positive response from so many quarters, the "whiteness 70" project effectively and continuously stimulated the copy paper market and spurred expanded use of recycled paper.

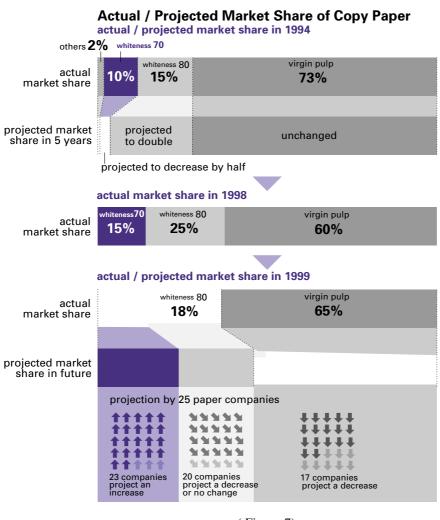
The percentage of local governments that had been called upon to cooperate nationwide and that had adopted "whiteness 70" recycled copy paper had already reached 100% at the prefectural and city government level, and at the ward and municipal government level in the 1998 stage it came to 15%. In the world of marketing, where market share of 10% makes a hit product and extends its sales, the current adoption rate of 15% at the ward and municipal level that was reached in 3 years, is a considerable level of expansion.

The 5-year market estimates in 1994, when the discussion forum was started, by the forum members from the manufacturer side, particularly the supplier side, were that the virgin pulp copy paper share then at 73% level would not be cut into in a big way, and it was predicted that "whiteness 80" would account for the bulk of recycled paper at a 15% share, with indications that "whiteness 70" would fall by less than half from 10%. But in reality, five years have passed since then, and in 1999 – the year when the Japan Junior Chamber and Office Chonai-kai sponsored popularizing activities that have yielded positive results across the board – the market share for virgin pulp copy paper had lost 8% falling to 65%, the "whiteness 80" was practically unchanged at 18%, and "whiteness 70,"

contrary to the estimates of the manufacturer side, had increased by a multiple of 1.7 to 17%.

The view held by most on the manufacturer side now is that from this point on the share for virgin pulp paper will become lower, the share for "whiteness 80" recycled copy paper will be unchanged at best, and the share for "whiteness 70" recycled copy paper will continue to increase.

(See Figure-7) ctual / Projected Market Share of Copy Paper



(Figure-7)

## 3. As a Social System

The scenario for the "whiteness 70" project was that if the user side could overcome its "preference for whiteness" then the manufacturer side would respond by being able to bring about a virtuous cycle and make the expanded use of recycled copy paper a reality.

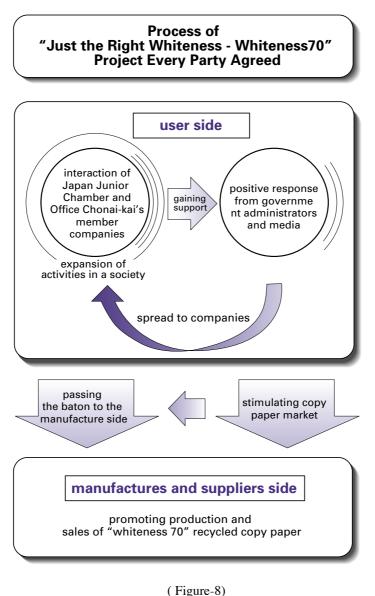
In 1995, before Office Chonai-kai had actively begun its popularization activities, "whiteness 70" recycled copy paper had zero new brands coming out, and there were some products that were ceasing production. Due to the expanding rings of positive response to the popularization activities, the various manufacturers and suppliers have now introduced new brands one after another, and today there are as many as 65 varieties.

In this way the users and the manufacturers have steadily followed the process, step by step, of acting together in response to the increased use of "whiteness 70" recycled copy paper and its expanded production and sales.

"Whiteness 70" offers an economy from which both sides can benefit. Along with sorting and collecting, the expanded use of recycled paper, which comprises the wheels on which the used paper recycling vehicle runs, is starting to take root through the mechanisms of the market.

In April of 2001 the Green Purchasing Law was enacted and "whiteness 70" recycled copy paper was expressly positioned as a specified supply article. Starting as a volunteer project, "whiteness 70" is now considered a part of the structure of society.

(See Figure-8) Process of ÅgJust the Right Whiteness – Whiteness 70 Project Every Party Agreed



(Tiguie-6)

October, 2001 Office Chonai-kai held a national summit, "Just The Right Whiteness – Whiteness 70" jointly with the Japan Junior Chamber and the Tokyo Municipal Government, to assure the popularization and broad establishment of recycled copy paper, and finished a large scale enlightenment movement.

Office Chonai-kai's activities over a 7 year period, which have been aimed at popularizing and expanding "whiteness 70" and supported by our partnership with the many people on the user side, is now in cooperation with the manufacturer side. We have entered the time when "whiteness 70" will really take root in the market as a desirable recycled product with efforts made by manufacturers and suppliers who are professionals of production and sales of paper.